



**FISH HEALTH MANAGEMENT
GRANT F-75-R-13**

January 1 - December 31, 1996

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ABSTRACT

This report contains a description of the activities of the Eagle Fish Health Laboratory (EFHL), operated by the Idaho Department of Fish and Game (Department), for the calendar year 1996. The primary charge of this program is to monitor, inspect, and improve the health of fish raised at 13 resident hatcheries, 11 anadromous hatcheries and satellites, and a facility, which rears ESA-listed captive salmon broodstocks. Results of these diagnostic cases are presented in the text by program and facility. The most significant pathogens encountered in the resident and anadromous programs were cold water disease, bacterial kidney disease, infectious hematopoietic necrosis virus, Bacterial Gill Disease (BGD), and furunculosis. A high prevalence of tumors and anomalies occurred in the sockeye salmon *Oncorhynchus nerka* captive broodstocks. Department fisheries managers, researchers, hatcheries, and EFHL pathologists utilized the newly completed wet laboratory during the year.

Wild salmonids were examined for the parasite that causes Whirling Disease (WD) from all regions of the state. Cutthroat trout *O. clarki* broodstocks from Henrys Lake in the Department Upper Snake River region was the only new occurrence this year. The Department initiated research to determine the impact of WD on wild salmonid populations in four drainages previously demonstrated positive for *Myxobolus cerebralis*. The staffs of both the EFHL and Eagle Hatchery supported this research.

EFHL staff remained active participants in regional and national fish health issues. This included administering the Investigational New Animal Drug program through the Western Regional Investigational New Animal Drug (INAD) Program. Examples of additional liaison activities are included in the text.

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PERIOD COVERED BY THIS REPORT

Reports for the Fish Health Administration previous to 1995 have covered activities performed during the period July 1 to June 30 Idaho Department of Fish and Game (Department) fiscal year. This format required considerable duplication of effort, since data are normally tabulated for the calendar year for each hatchery's annual report. Therefore, for efficiency in reporting for this Dingle-Johnson contract, the period of time is changed to reflect a calendar year tabulation of activities. Therefore, the period covered by this report is calendar year 1996.

Kent Hauck, former Fish Pathologist Supervisor, resigned his position with Idaho Department of Fish and Game in January 1996 to accept a position with the Utah Department of Agriculture. The Supervisor's position at the Eagle Fish Health Laboratory (EFHL) remained vacant until August since matching Department license funds were involved in funding this position. Doug Munson assumed the responsibilities during the interim. Keith A. Johnson, formerly the Fish Pathologist with the resident hatcheries, was hired to fill the Supervisor's position in August 1996. No other changes in lab personnel occurred during 1996.

FISH HEALTH MONITORING AND MANAGEMENT ACTIVITIES OF THE IDAHO DEPARTMENT OF FISH AND GAME

Resident Hatchery Activities

Fish Pathologist Douglas Burton, stationed at the Eagle Fish Health Laboratory (EFHL), services hatcheries which rear and plant resident species. The pathologist's duties include: collection of samples from diagnostic and inspection cases for 11 culture facilities and their associated captive and feral broodstocks; monitoring the diagnostic results; reporting results to hatchery management; recommendation and supervision of treatments; and preparation and maintenance of files for Investigational New Animal Drug (INAD) reporting through the Western Regional INAD Program for each station. Samples were also obtained as part of a survey of wild salmonids of Idaho waters for whirling disease (WD). These activities resulted in generating 148 laboratory accessions for the wild fish survey, 62 diagnostic, 65 inspection, and 21 research cases for the resident program. The specific results for these cases are included in Appendix 1 and are listed by Department region and for each fish culture facility. A brief summary of the results of 1996 activities for each resident station follows.

American Falls Hatchery

Systemic flexibacteriosis, cold water disease (CWD), caused by *Flavobacterium psychrophilum*, was detected in Hayspur strain rainbow trout *Oncorhynchus mykiss* at American Falls Fish Hatchery (AFFH). Two clinical outbreaks were successfully treated with oxytetracycline (OTC)-medicated feed at a rate of 10 g OTC/ 100 lbs of fish/day for 14 days, a treatment level, which was permitted through INAD # 9332. Further progress has been made in reducing the impact of this disease through use of less stressful culture practices. The AFFH manager also feels that he was able to reduce the signs of chronic, low-level CWD (tail-rot) by increasing the feeding rate to those lots of fish.

Ashton

The Ashton Fish Hatchery (AFH) brook trout *Salvelinus fontinalis* fry in the hatchery vats experienced losses due to gas bubble disease (total gas pressure = 104%). This is an intermittent problem at this hatchery, which may be related to periods of snowmelt and runoff. The lack of head-pressure in the hatchery building makes installation of degassing structures difficult. The same brook trout were sampled in mid-summer due to slightly elevated mortality. The fish were found to carry both *F. psychrophilum* and *Aeromonas hydrophila* bacteria. Loading density was reduced and mortality rate declined without further treatment.

The Colorado River rainbow trout destined for Hayspur Hatchery broodstock were inspected and found to carry *Renibacterium salmoninarum* (RS) by Enzyme-linked immunosorbant assay (ELISA). The Colorado River rainbow trout already at Hayspur were already known to carry RS, so it was decided that transfer of these fish was no additional threat to the program. AFH's catchable rainbow trout were also inspected and no pathogens were detected.

The proximity of AFH to waters containing *M. cerebralis* remains a concern. Options to fully enclose the hatchery intake, as well as means to fund such reconstruction, need serious consideration.

Cabinet Gorge Hatchery

Kokanee *O. nerka kennerlyi* production at Cabinet Gorge Fish Hatchery (CGFH) originates primarily from eggs taken at Sullivan Springs on Lake Pend Oreille. Spawners at that site are sampled annually for fish pathogens. Positive results in 1996 included RS antigen by ELISA (low-levels) and several bacteria, including *F. psychrophilum* and *Pseudomonas fluorescens*. No replicating viral agents or *M. cerebralis* spores were detected. Production fish at the hatchery were not sampled in 1996. The only reoccurring problem on the hatchery is bacterial gill disease (BGD), which now seems to be controlled by the installation of baffles and changes in feeding and cleaning patterns. Clinical bacterial kidney disease (BKD) was seen on the facility when captive kokanee broodstock were held for two or more years. This program was discontinued in 1994 and no signs of BKD have been evident since.

Clark Fork Hatchery

Infectious pancreatic necrosis virus (IPNV) and CWD were the major causes of mortality at this station. Clinical BKD, caused by RS, is also present in the cutthroat *O. clarki* and brook trout populations, although losses are more chronic than acute. Losses to virus occur primarily in fry, (<1.0 gram in size), and can exceed 50% in some lots. The hatchery water supply is drawn from Spring Creek, an open source harboring wild brook trout, which have been proven carriers of both IPNV and RS. Until major engineering changes can be made in the water intake system, Clark Fork will continue to have problems with these pathogens.

Fingerling Hayspur-strain Kamloops trout and cutthroat trout were both diagnosed with CWD (*F. psychrophilum*) during 1996. The cutthroat had a concomitant infection with *P. fluorescens*, which allowed for treatment with OTC without an INAD. Treatment significantly reduced mortality rates.

Grace Hatchery

Rainbow/Kamloops trout were diagnosed on three occasions with bacterial gill disease (BGD) at Grace Fish Hatchery (GFH) in 1996. Chloramine-T, used under INAD #9321 protocols, effectively reduced mortality rates in each episode. Each episode occurred in raceways, which receive re-use water from the upper portion of the hatchery and at times when that upper portion was at maximum capacity. Given such conditions, BGD is almost inevitable. Adjustments in hatchery programs and management are necessary to avoid this situation in the future.

The pathogens *psychrophilum* and RS (antigen by ELISA) were both detected in fish at GFH in 1996. The former did not cause losses deemed great enough to treat and the latter has never been known to cause clinical disease at this hatchery.

Hagerman State Hatchery

Fish pathogens/disease syndromes observed at Hagerman State Fish Hatchery (HSFH) during 1996 included: *Ichthyobodo*, BGD, CWD, infectious hematopoietic necrosis virus (IHNV), columnaris disease (*Flavobacterium columnar*), and gill aneurysms/bleeding gills (presumptively caused by metacercaria of the blood fluke *Sanguinicola*). Chronologically, the first problem usually encountered is concurrent BGD and *Ichthyobodo* infestation of fry in the hatchery vats. This problem was partially solved by eliminating the use of belt feeders and returning to the practice of presenting feed by hand until the little fish have established their feeding behaviors. This reduces waste feed and improves environmental conditions. Virus (IHNV) and CWD are generally the next disease problems to occur, after the fish are moved from the hatchery vats to the small "West" raceways. The virus occurs sporadically, seemingly dependent on whether or not predator vectors (birds, mink, etc.) are able to penetrate the fence around the raceways. When CWD occurs, treatment is generally successful using OTC-medicated feed under INAD 9333. The exception being when CWD is complicated by concomitant virus infection. Much worse losses to IHNV occurred after the fish were moved from the "West" raceways to the "Large" raceways. Work is still in progress to complete bird netting over this portion of the hatchery, so efforts to exclude the likely mechanical vectors of the virus are only marginally successful. Finally, fish reared for extended periods in the large raceways are more likely to show signs of either columnaris disease or gill aneurysms. Columnaris was successfully treated with OTC under an INAD protocol.

An attempt was made to quantify the impact of the blood fluke *Sanguinicola* on production at HSFH. Specifically, a group of Kamloops trout was taken from a lot of fish, which had been reared in raceways on the Riley Creek water supply. These fish were kept on that water and were sampled monthly over the summer. Aneurysms on the secondary gill filaments were presumed to indicate presence of fluke metacercaria. Numbers of fish with aneurysms were recorded to find the prevalence in the population and total numbers of aneurysms per fish were counted to indicate levels of infection in individuals. Prevalence increased from May (56.7%) to June (77.4%), then significantly decreased in July (28.1%) and August (25.8%). No sample was taken in September, but in October the prevalence had increased to about the same as in May (60.0%). Severity of infection in individuals was determined by the average number of aneurysms per gill arch. Negative fish had no aneurysms evident under a dissecting microscope. Fish with an average of ≤ 1.5 aneurysms per gill arch were ranked "low," those with 1.5 to 10 aneurysms per arch were ranked "moderate," and those with >10 were ranked "high." An index of infection was then calculated by giving a value to each ranking (negative=0, low=1, moderate=2, high=3), multiplying those values by the number of fish in each ranking, adding those numbers together, then dividing

that total by the number of fish sampled. It was determined that the levels of infection in individual fish followed the same pattern as the prevalence in the population. The index of infection went up from May (1.00) to June (1.84) then dropped in July (0.59) and August (0.45). The index then went up again in October (1.13). An interpretation of this information is difficult to make with only one year's observations. The HFH personnel reported that the "bleeding gill" syndrome, attributed to rupturing aneurysms when the fish are handled, was not as severe in 1996 as in past years. This is possibly due to different water conditions, or due to a change in operating practice. Specifically, reducing the rpms on the fish-loading pump, which reduced the pressure change experienced by the fish when, loaded on transport trucks. Similar observations should be made for several years, recording differences in water conditions, temperatures, etc., in order to learn why this syndrome has greater impact in some years than in others. Lack of histologic correlation between the presence of aneurysms and *Sanguinicola metacercaria* is beginning to raise suspicions that the syndrome may not be caused by the parasite.

Hayspur Hatchery

Hayspur Fish Hatchery (HFH) is the Department's major source of rainbow trout eggs, with 1996 production in excess of 12 million green eggs. Fish production at this facility is limited to broodstock replacement, reared on specific pathogen-free spring/well water. No fish were reared on surface water (Loving Creek) or in the earthen ponds, due to the probability of infection by *M. cerebralis*. No clinical diseases were observed on the facility in 1996. The major focus of the EFHL's work at HSFH was inspection of the brood populations and replacement lots. No replicating viruses were detected from 617 individual fish sampled over the course of the year. The ELISA detected a carrier state of RS from every population and/or fluorescent antibody testing (FAT) of filtered ovarian fluids, although FATs on kidney tissue imprints were negative from all individuals tested (279 total). No clinical BKD has ever been observed on this hatchery and both prevalence and levels of bacteria have been reduced over time due to culling eggs from positive females in the broodstock replacement lots.

All females from spawning populations were injected with 5 mg/kg OTC approximately one month prior to spawning. The intent was to reduce the possibility of transmission of *F. psychrophilum* bacteria to the next generation via the eggs. Injected fish will never be released for human consumption. A more aggressive program, using both chemical and vaccination therapies to eliminate this pathogen from the population, will be initiated in the near future.

Henry's Lake Hatchery

Green eggs taken from spawning runs of cutthroat and brook trout at Henrys Lake Fish Hatchery (HLFH) are subsequently incubated at Ashton Hatchery. Eyed eggs may be shipped to other hatcheries (cutthroat to Mackay, brook trout to Clark Fork) or kept for rearing at Ashton (brook trout). Spawning adults from each run were sampled for BKD, virus, and WD. Cutthroat samples were negative for viruses. All of the 12 ELISA samples for BKD antigen were graded low positive, but only two of 335 ovarian fluid pools were positive for RS by FAT. Eggs of the positive pools were discarded. *Myxobolus* spores had been detected from this population in past years, but histologic examination was unsuccessful in determining species. This changed in 1996, with spores found in the cartilage of a positive fish. This was the first confirmation of *M. cerebralis*, the causative agent of WD, in HLFH.

No replicating viruses were detected in the samples from adult brook trout. *Myxobolus* spores were detected from 1/10 pools by digest, but species was not confirmed histologically and ELISA values indicated a 32% prevalence of the RS antigen at low levels. The FATs on 50 kidney imprints and 313 ovarian fluid samples were all negative for RS. Bacterial samples detected both *Aeromonas salmonicida*, the causative agent of furunculosis, and *F. psychrophilum* from the brook trout.

The presence of RS, *A. salmonicida*, and *M. cerebralis* in fish from HLFH require that the greatest care be taken to disinfect all eggs and equipment that leave the facility.

Kootenai Hatchery

The Kootenai Tribe of Idaho operates Kootenai Fish Hatchery (KFH) and rears ESA-listed white sturgeon *Acipenser transmontanus* for release to the Kootenai River. No fish were successfully spawned in 1996; therefore, only holdover fish from BY92 and BY95 were on station. No samples were taken from these populations this year. Two lots of the BY95 fish were previously determined to be positive for white sturgeon iridovirus. A small group of rainbow trout (300 fish) was kept on the station to provide fish culture training for Kootenai Tribal members. These fish originated as certified disease-free eggs from the College of Southern Idaho and no evidence of clinical disease was observed in the group. Pathologists at the EFHL cooperate in this hatchery program as advisors.

Mackay Hatchery

No clinical diseases were reported at Mackay Fish Hatchery (MKFH) in 1996. The only pathogen detected by routine inspection of production fish was the causative agent of CWD in a selected group of deformed ("dwarfed") Henry's Lake cutthroat trout fingerling. No treatment was applied, since total losses were minimal. The proximity of waters from which *M. cerebralis* has been detected continues to pose a threat. The MKFH personnel must continue to be alert to the possibility of contamination from adjacent waters, although the parasite has never been detected in fish reared on station. Effective exclusion of birds and fish-eating mammals would significantly reduce concern over this situation and should be given high priority.

The MKFH receives green kokanee eggs from a spawning operation at Deadwood Reservoir (operated by Nampa Hatchery personnel). Inspection of the feral spawning adults detected no replicating viruses or *Myxobolus* spores. The RS antigen was detected by ELISA in 42% of the samples, although no bacteria were detected by FAT in 60 kidney imprints.

McCall Hatchery Resident Program

The Fish Lake cutthroat egg take for the McCall Fish Hatchery (MCFH) Resident Program was low this year due to a reduced number of returning adults. Ovarian fluids were collected for pathogen screening, but only ten fish were sacrificed for tissue samples (ELISA and kidney FAT for RS, kidney/spleen/pyloric cecea for Virology, heads for WD and gut for *C. shasta*). The only positive results from these tests were RS by ELISA (eight of ten, all at low levels). Much of the Department resident cutthroat program is based on this feral fish population, which routinely tests positive for RS, by ELISA. The majority of the progeny are destined for high mountain lake

stocking throughout most of Southern Idaho, with the remainder returned to Fish Lake to maintain the program. Clinical signs of BKD have never been observed in this population; however, consideration should be made to giving an erythromycin treatment to the fry prior to stocking. A policy decision on the cost effectiveness of a feral, potentially diseased brood population versus a clean captive source must be made.

Doug Munson examined a group of Wyoming grayling *Thymallus arcticus*, which had just been transferred from Ashton Hatchery to MCFH. The fish were extremely small (approximately 3,000/lb), making them nearly impossible to sample for most pathogens. Whole fish were processed for virology, but no viruses were detected. The losses decreased naturally and may have been a natural drop off of first-feeding larvae or a response to the handling and transfer.

Nampa Hatchery

Rainbow trout cultured at Nampa Fish Hatchery (NFH) frequently encountered CWD (*F. psychrophilum*) and motile aeromonad septicemia (MAS) (*A. hydrophila*). Not all episodes were severe enough to require treatment. Oral therapy with OTC (under INAD # 9332 for CWD) was generally successful, although one outbreak of CWD required a second application to resolve the situation.

A single adult male steelhead apparently entered the hatchery via the Wilson Drain system; it evidently leaped over the tail screens and was found swimming in one of the production raceways. The fish originated from a transfer of excess fish from the Snake River (Hells Canyon Dam fish trap via Oxbow Hatchery) to the Boise River. The fish was sampled for pathogens (viruses, RS, *C. shasta*, and *Myxobolus*). The only positive result was for RS antigen by ELISA at a low level. Improved structures to exclude feral fish are imperative to maintain the relatively disease-free status of the NFH.

Maintenance of the bird and animal exclusion structures and care in importing eggs from certified sources should be successful in maintaining healthy fish at this hatchery. Priority should be given to reducing CWD through both chemical therapy and hatchery management.

Sandpoint Hatchery

The Washoe Park cutthroat broodstock population at Sandpoint Fish Hatchery (SFH) was sampled twice, at six-month intervals, in order to meet the criteria for certified disease-free status. No reportable viruses, bacteria, or *Myxobolus* spores were detected or recognized by Fish Health Blue Book methods. One sample of kidney tissue tested positive for RS antigen by ELISA at a very low level. Because ELISA is not recognized by the American Fisheries Society/Fish Health Section Blue Book and the very low result could very well have been due to sample contamination, the population could still have been certified "disease-free". The point became moot on December 31, when rain on a heavy load of snow collapsed the SFH water line and all of the adult cutthroat population was lost.

The SFH received green eggs from a landlocked fall chinook salmon *O. tshawytscha* spawning operation at Wolf Lodge Creek, on Coeur d'Alene Lake. The ELISA detected RS antigen in samples from four of 34 fish (11.8%). Sac fry from these eggs were on hand when the water line

was lost, as were small lots of BY96 Washoe Park cutthroat fry and BY96 Kamloops trout fry. All fry were transferred to Cabinet Gorge Hatchery on January 1, 1997, with good survival.

Anadromous Hatcheries

The Department hatchery facilities and associated satellite release and adult capture stations for steelhead and chinook are funded through Lower Snake River Compensation Plan (LSRCP) and Idaho Power Corporation contributions. A. Douglas Munson is the EFHL Fish Pathologist serving the fish health needs for these anadromous facilities. The annual summary of results for the hatcheries and satellite stations is presented in Appendix 1. In 1996, a total of 178 inspection and diagnostic cases were done by the EFHL for the Anadromous Hatchery Program.

Clearwater Hatchery and Crooked River, Powell, and Red River Satellite Facilities

Clearwater Hatchery

The Clearwater Fish Hatchery (CFH) produces steelhead and chinook in conjunction with Crooked River, Powell, and Red River satellite facilities. A total of 58 inspection and diagnostic trips were made to these facilities. In 1996, disease conditions included BKD, CWD and MAS in juvenile chinook. Broodstock examinations detected IHNV in Dworshak NFH steelhead. In adult samples WD was not confirmed.

The main hatchery production stocks were virtually free of pathogens during this past brood year (Appendix 1). Steelhead and chinook health was exceptional, as no pathogens were detected during most of 1996. Acute losses were not experienced and Clearwater was relatively disease free for the remainder of the rearing period. One OTC-medicated feed treatment was applied for MAS (in August).

Nutrition and container design may be limiting factors in the Captive Rearing Program at Clearwater Hatchery. In general, the oldest captive brood fish at Clearwater were the least healthy. Clinical BKD was observed in captive brood stock.

Crooked River Satellite Facility

1994 Crooked River spring chinook, acclimated in the spring of 1995 at the Crooked River satellite, still had a very low prevalence of cataracts. The actual cause of these maladies has not been identified. Preliberation sampling found no pathogens for RS, viral samples and WD. 1993 Crooked River spring chinook were not positive via FAT, all pools were low positive via ELISA for RS. No other etiologic agents were detected during preliberation sampling.

There were no acute or chronic losses of fish at this facility. Fish at Crooked River appear to be very robust and healthy. It is important to monitor for the pathogens *M. cerebralis* and RS in wild and feral fish in Crooked River and its tributaries.

Powell Satellite Facility

No problems were found at Powell during summer acclimation. There was high silt during rain run-off from clear-cut areas and we are working with the Forest Service and logging companies

to diminish silt. Only 66 fish were spawned with a low optical density; 1/4 RS found via ELISA technology; 0/20 FAT virology; 0/20 WD. No problems were found at this facility.

Red River Satellite Facility

Acclimated fish were examined during and before release from the Red River facility. Testing results are 0/20 FAT and 3/3 pools positive via ELISA testing, two with moderate and one with low optical densities. Red River did not have a fall release program this year. Only ten chinook were spawned at this facility that was ELISA positive; it was a low optical density.

Magic Valley Hatchery

Dworshak, East Fork, Pahsimeroi and Sawtooth steelhead stocks required 29 inspection trips during 1996 at the Magic Valley Fish Hatchery (MVFH).

The MAS persisted after the CWD episode in the 96 Dworshak steelhead B stocks. Two treatments for CWD were applied; the first was a standard ten-day 3.75 grams/day and the second was a 14-day treatment at 10 grams/day under the 96 Dworshak steelhead B INAD #9332, Permit 20554.

Fish health at MVFH has been good. No acute losses were experienced at the MVFH this year.

The organosomatic index revealed very robust fish, with plenty of stored energy (fat index of four). In 1996, IPNV was not isolated from MVFH. There were no signs of WD, nor was the parasite found at MVFH. To curtail any chance of horizontal transmission of etiologic agents, a stringent program of disinfection should be continued at MVFH.

McCall Hatchery

A total of 12 inspection and diagnostic cases were processed from McCall Fish Hatchery (MCFH) during 1996.

This year was the first segregation program for BKD at the MCFH. Progeny from brood females, which had ELISA values (above 0.25), were segregated and reared separately from the general clinical population. These HBKD segregation groups experienced elevated mortality due to clinical BKD. It was epizootic in HBKD groups; however, mortality to BKD was limited to the HBKD group. There was a segregated release of BY95 HBKD South Fork summer chinook implemented by transport and release of this HBKD group approximately two weeks after the last production group was released.

The most prevalent disease condition at MCFH has been BKD in juvenile chinook during the second winter of rearing. Intraperitoneal injections of adult females with Erythromycin, combined with segregation rearing and two prophylactic Erythromycin feedings of progeny, have reduced losses dramatically. Limited mortality to BKD occurred during December. No other disease agents cause problems at this station.

A benefit of the segregation program is that production fish were not exposed to RS transmitted horizontally. Fish health programs have been successful at MCFH. The MCFH would benefit from a BKD culling program. BKD high segregation groups should be reared at lower density be given better feed formulations, and longer and more frequent prophylactic treatments of erythromycin-medicated feed.

Niagara Springs Hatchery

Seventeen inspection or diagnostic trips were made to Niagara Springs Fish Hatchery (NSFH) during 1996 to examine Hells Canyon and Pahsimeroi steelhead stocks. IHNV, CWD and furunculosis were responsible for mortality. Treatments for furunculosis with Romet 30 were done in September 1995.

The first portion of the rearing year was virtually disease free. During winter months, the bird-hazing sprayers were turned off due to freezing and the birds arrived on station.

In order to improve fish health at NSFH, several impediments to fish culture must be corrected. The nursery rearing should be expanded and improved. The spring should be enclosed and the bridge over the spring sealed to keep spillage from fish transport trucks from contaminating the spring. Furthermore, a complete exclusion of piscivorous birds from the hatchery (by installing netting/wire) would be the best solution to the bird problem at NSFH.

Oxbow Hatchery

Ten inspections were made with Hells Canyon and Oxbow Fish Hatchery (OFH) A steelhead adults during the winter spawning season. Pathogens detected were *RS* and *Ceratomyxa shasta*. The latter infections in adults presumably result from exposure during the return migration.

Pahsimeroi Hatchery

Samples of steelhead and chinook from Pahsimeroi Fish Hatchery (PFH) resulted in 29 laboratory assessments for the EFHL.

Adult steelhead A strain and adult and juvenile summer chinook were sampled for pathogens. No evidence of virus was detected in any group. *RS* could be detected by ELISA, but typically at low levels. *WD* is endemic to the drainage and juvenile chinook will become positive for *WD* when reared on river water. Clinical signs became apparent during the fall and winter months. The parasite was detected in adult steelhead, but not adult chinook.

Salmonids reared at PFH have been positive for *WD* for almost a decade and 1996 was no different. Half of the fish were early-reared at Sawtooth Hatchery to avoid early challenges of the parasite *M. cerebralis*, the causative agent of *WD*. Once the fish reached a minimum of seven cm, they were ponded at the upper facility at PFH. The other half of the fish were reared full term at PFH. All fish were mixed, with no differential markings.

Prophylactic treatments of erythromycin-medicated feed were administered twice, in accordance with PFH's INAD protocols. The disease RS was not found via FAT methods. Pooled samples examined via ELISA methods were 4/4 positive via ELISA, low optical density.

Fish reared at early rearing facilities at the lower raceways at PFH had chronic problems with Environmental Gill Disease, while those ponded at the upper facility experienced no loss to gill disease. Acute losses were not experienced at PFH this year.

The PFH needs to improve the water source for both the lower and upper facilities. The rearing programs should utilize specific pathogen-free (SPF) water to avoid *M. cerebralis*. To completely avoid the parasite, the dirt ponds at the upper facility should be replaced by concrete raceways, which would also reduce RS in PFH's stock. Attempts to locate a SPF water source for early rearing has produced a source, which is gas (112%), supersaturated and can cause low chronic mortality and morbidity. Secondary invaders cause MAS and another source of chronic mortality. Precocious males die off after transport from Sawtooth.

Rapid River Hatchery

Nineteen inspection and diagnostic cases were made with samples from Rapid River Fish Hatchery (RRFH) during 1996.

Pathogens and diseases detected in juvenile spring chinook include RS by ELISA, Erythrocytic Inclusion Body Syndrome (EIBS) in BY93 yearlings, CWD and spores of *Myxobolus* sp..

The RRFH had one of their best fish health years. "Fuzzy-tail," which has been a perennial problem at this hatchery was virtually non-existent. Pooled kidney samples, examined via ELISA methods, had three of four pools positive for RS (all low titers) for preliberation samples. No fish were found to be positive for RS via FAT. *Flexibacter psychrophilus* was not found in routine examinations during random inspection sampling.

The EIBS was found in the RRFH in 1996. Seventy percent of the fish examined were positive for the viral inclusion bodies. Anemia was associated with this infection; however, no mortality could be attributed to this infection.

Spores of *Myxobolus* were detected, but a histopathology sample was not collected. Thus, *M. cerebralis* was not confirmed at this facility. Acute losses were not experienced at RRFH in 1996.

The BKD culling and/or a segregation program should be implemented to maintain fundamental fish health conditions. Fish should also be fin clipped when water conditions are optimal concerning sediment load and temperature.

The MAS caused an August mortality of juvenile fish. Mortality was controlled with one treatment of OTC at the standard rate (375 grams/100#/day).

Sawtooth Hatchery

Fifty-two trips were made to check juvenile Sawtooth, East Fork, and Pahsimeroi chinook stocks and Pahsimeroi and Sawtooth steelhead stocks at Sawtooth Fish Hatchery (STFH). In addition, samples were taken or obtained from adult East Fork Sawtooth steelhead and chinook. No evidence of virus resulted. While BKD antigen was detectable in adults of both species, clinical BKD did not cause loss in chinook this year. This may be due to more prolonged rearing on well water. This has also resulted in decreased detection of WD in chinook, since the river water supply has been demonstrated to be infectious for WD.

Fish health at STFH was excellent for most of the 1994 Sawtooth spring chinook. No acute losses were experienced at STFH this year. Losses due to BKD are classified as chronic.

Early-reared BY94 Pahsimeroi summer chinook experienced losses to gas bladder infection; no treatment was applied.

Organosomatic indices of randomly collected fish were excellent. FAT Index averaged 3.2 and the gills of these fish were in good condition. The pathogen *M. cerebralis* was found in all groups. It will be very important to start rearing the chinook at STFH on well water. This includes full-term rearing on specific pathogen free (SPF) water. Expanding the well-water supply would also reduce incidence, intensity and prevalence of RS.

SOCKEYE AND CHINOOK CAPTIVE BROODSTOCK

The Department facilities at Eagle include both the EFHL and the Eagle Fish Hatchery (EFH), which is dedicated to rearing ESA-listed Redfish Lake sockeye salmon *O. nerka* captive broodstock to maturity and the resulting progeny for release. This program began in 1991 and continues to the present. Keith Johnson was the Principle Fisheries Research Biologist in charge of the captive broodstock programs from 1991 through 1996 and now serves as the pathologist for this program.

A second experimental project of a similar nature was initiated in 1995 to include rearing ESA-listed chinook from collections of wild parr. The site selected for the freshwater rearing portion of this project was EFH, which shares grounds with the EFHL. The marine site was the National Marine Fisheries Service's (NMFS) Manchester Marine Laboratory. Both the sockeye and chinook programs generate considerable case workload for the EFHL. Program activities for 1996 follow separately, by species.

Redfish Lake Sockeye Salmon Captive Broodstock

A total of 108 cases at EFHL were generated from brood years 1993, 1994 and 1996 of the sockeye broodstock program. Significant findings include continuing to document a high prevalence of lymphosarcoma tumors, the lack of replicating virus and BKD, indicating that quarantining efforts were successful, internal and external mycosis, nephrocalcinosis, and a undetermined nutritional condition.

The BKD control efforts have been applied to broodstock at both EFH and Manchester. The Department developed a management plan for rearing progeny, based on the ELISA optical density

of kidney tissue of the female parent. Cut-off optical density values were employed to prevent the re-introduction of BKD positive eggs into EFH. Progeny of BKD-positive females were reared as three separate lots at ODFW's Bonneville Fish Hatchery (BFH) in 1995. Three examinations for BKD by ELISA were done with these three lots of sockeye at BFH. Lots 1 and 2 were transported to Redfish Lake in May 1996 and released. Lot 3, which were the progeny of females with the highest ELISA od values and experienced a BKD epizootic, were not released in Idaho waters. These ELISA-based segregation and rearing practices are designed to reduce the risk of having BKD in returning adults. The Department believes that by these practices, there will be an advantage toward recovery if the returning adults are free of BKD.

The EFHL staff participated in evaluation and documentation of atresia of ovaries for the second year. These data resulted in a policy, approved by NMFS, which allowed culling of brood fish remaining after two maturation cycles. This culling prevents dedication of hatchery space and water to fish, which would never produce viable gametes.

A single anadromous female returned to the trap on Redfish Lake creek in September 1996. Her eggs were fertilized with four genetic types of Redfish Lake sockeye from the captive broodstock program. Pathology samples were taken and processed for viruses, BKD and WD. There were some *Myxobolus* sp. spores found, but they were not consistent with the morphology and size of *M. cerebralis*. These findings allowed the transport of half of the eggs to NMFS facilities in Washington State.

The proximity of the EFHL and the Redfish Lake Sockeye Salmon Captive Broodstock Program has resulted in benefit for both programs. This support has advanced the quality of fish culture of the ESA-listed broodstock.

Snake River Chinook Captive Rearing

This year marked the second collections made for Idaho ESA-listed spring chinook for an experiment to test the feasibility of raising chinook parr to maturity in fish culture facilities. During 1996, BY95 parr were collected from only the Lemhi River within the evolutionarily significant genetic unit of the species, converted to hatchery culture, and began rearing at STFH. The EFHL continued to participate in this program in the capacity of lending fish health support and in processing and storing samples for genetic analysis.

IDAHO WILD FISH SURVEY

Examinations of samples obtained from wild fish in the State of Idaho have been a role taken by the EFHL since the mid-1980's. The distribution of *M. cerebralis* and the impact of the parasite on wild and hatchery salmonid populations has been a concern of the Department since the 1985, when it was detected in trout which contracted the infection from Idaho waters. Efforts in 1996 were directed to investigate if there is an affect on wild fish populations because of the negative impact of the WD parasite (*M. cerebralis*) experienced with some wild rainbow trout populations in Montana and Colorado. The Department fisheries research biologist Steve Elle was funded to investigate whether WD-related population effects are present. His research focused on live-boxing susceptible salmonids in rivers, which had been previously demonstrated to be infectious for the WD parasite. We adapted a quantitative spore-load estimating protocol from the

Colorado Division of Wildlife fish pathology group and applied this to the live-boxed trout. The general conclusions of this work are as follows:

1. Infections obtained by exposing rainbow and cutthroat trout to the Big Wood River for ten days during July were mild compared to those obtained in the Colorado River. The population structure in the Big Wood River does not appear to be affected by the presence of *M. cerebralis*.
2. Cutthroat trout appear slightly less susceptible, compared to rainbow trout, when exposed to waters of the Big Lost River. Infections, as expressed by enumeration of spores per head, in rainbow trout varied from negative to severe.
3. Rainbow trout population age structure in the South Fork Boise River, Silver Creek and South Fork Snake River does not appear to be affected by the parasite.
4. There has been a decrease in young age classes of rainbow trout in the Big Lost River, but an increase in biomass of brook trout, a species also susceptible to the parasite.
5. Rearing steelhead on WD-free well water until > 80 mm at STFH results in mild infections when the steelhead are subsequently reared at STFH on Salmon River water and at Pahsimeroi Hatchery on river water. These hatchery management actions will be continued whenever space and water constraints will permit.

The only new location for *M. cerebralis* in Idaho waters was Henry's Lake, as reported in the Resident Hatcheries section of this report. Wild cutthroat and rainbow trout were sampled for WD during a population inventory float trip down the Middle Fork Salmon River. These included five of the major tributary streams. Samples from this hard duty revealed *Myxobolus neurobius* spores, but those of *M. cerebralis* could not be confirmed. Genetic samples were taken from all fish sacrificed and the results are not available at this time.

Fisheries staffs at various Department regional offices submitted samples from wild fish to EFHL throughout the year. A total of 56 laboratory accessions were generated by these requests. Most of these samples were examined for WD to expand our knowledge of the distribution of the parasite. As mentioned above, there were no new positive locations found, except for Henry's Lake.

TRANSPORTATION AND IMPORTATION PERMITS

The EFHL was delegated the responsibility of issuing importation permits by the Department Fisheries Bureau during 1996. These permits are required when non-aquaculture species are released to public waters of the State of Idaho. A total of 40 permits were issued. Most of these (33) dealt with grass carp (white amur) *Ctenopharyngodon idella* to be used for biological control of aquatic vegetation. The Department policy requires that these be certified free of Asian tapeworm and to be sterile triploids. The United States Department of Agriculture

Laboratory at Stuttgart, Arkansas generated the certification for both conditions. Other permits were issued to; the National Marine Fisheries Service (NMFS) for importation of Redfish Lake sockeye smolts from BFH and for release of adults for volitional spawning; to the United States Fish & Wildlife Service (USFWS) for coho eggs to Dworshak National Fish Hatchery for release to rivers of the Clearwater River system; to the Kootenai Tribe of Idaho for culture and release actions with endangered white sturgeon; and to the University of Idaho Aquaculture Research Institute.

REPORTS

Reports generated by the EFHL include the Annual Resident Fish Hatchery report for 1996 and the monthly LSRCP and disease summary reports. Presentations were given on the fish disease status in Idaho at the anadromous fish management meeting; at the Department hatchery managers' meeting; and at the PNFHPC semi-annual meetings.

PAPERS GIVEN

Papers were given on the status of WD in Idaho at the Western Fish Disease Conference and meeting of the WD Foundation.

Presentations were also given at a meeting, which emphasized the application of endocrinology to the culture of salmon captive broodstock with a summary in Aquaculture. The EFHL personnel attended eight meetings of the Snake River Sockeye Technical Oversight Committee and five meetings of the Chinook Captive Rearing Technical Oversight Committee during 1996.

PRODUCTION STUDIES AND SURVEYS TO ENHANCE FISH HEALTH

Several studies have become increasingly important for implementation as fish disease data has been generated.

For several years, OTC injections have been given to brood rainbow trout at Hayspur Hatchery to inhibit possible vertical transmission of *F. psychrophilus*, which is a problem at hatcheries receiving eggs from Hayspur. The primary recipients of these eggs are American Falls, Grace, Nampa and Hagerman hatcheries. No control groups have been available to test the efficacy of these injections.

Beginning in 1993, a RS culling program, using a modified fluorescent antibody test (MFAT), was begun at Hayspur. It is hoped that this sensitive method will allow more adequate detection of RS at low levels in ovarian fluids, thereby reducing the transmission of RS to progeny. To date, this test has proven more sensitive than direct fluorescent antibody tests and approximately the same as ELISA; however, the results do not correlate well with ELISA.

Progeny from one Hayspur rainbow female that had high RS levels in kidney ELISA and progeny from one Hayspur rainbow female that had high RS levels in ovarian fluid Membrane-filtration Fluorescent Antibody Test (MFAT) were reared in the Eagle wet lab and tested periodically to evaluate vertical transmission of RS. The RS was not detected in any of these test groups. A second group, consisting of progeny from one high ELISA female, is currently on hand.

Staff of the EFHL have cooperated during 1996 with cohorts in the fish health and fisheries management fields through the forum of the Pacific Northwest Fish Health Protection Committee (California, Oregon, Washington, Montana, British Columbia, Alaska); Rock Plains Fish Health Committee (Arizona, Nebraska, Colorado, Nevada, Utah, New Mexico, North Dakota, and South Dakota); membership in the American Fisheries Society, fish health section; cooperative ESA broodstock efforts (U. S. Fish and Wildlife Service, National Marine Fisheries Service, Shoshone-Bannock, and Nez Perce tribes, Bonneville Power Administration); universities (University of Idaho, Washington State University, University of Washington, Oregon State University, University of California-Davis, University of British Columbia, Malaspine College, and the College of Southern Idaho); with the private aquaculture sector and Whirling Disease Foundation.

APPENDICES



FISH HEALTH SUMMARY REPORT 1996

Report Date: 1/7/98

Idaho Department of Fish and Game

Eagle Fish Health Laboratory

1/1/96 TO 12/31/96

LOCATION		Class	Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species			IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1 PANHANDLE REGION		D														
94/95	PANHANDLE	CHANNEL CATFISH	96-238	7/8/96	-	-			-	-	-				DIAGNOSTIC	METAZOAN PARASITE FOUND IN LIVER; VIRO 0/12, BACTE 0/12
2 CLEARWATER REGION		D														
WILD	WHITE SANDS CREEK	CUTTHROAT TROUT	96-025	1/29/96								-			WILD FISH	MYXOBOLUS SPP. SPORES NOT CONSISTANT WITH M. CEREBRALIS, NO SPORES OBSERVED IN HISTO; WHD 0/2
WILD	WALTON CREEK	CUTTHROAT TROUT	96-026	1/24/96								-			WILD FISH	MYXOBOLUS SPP., SPORES NOT CONSISTANT WITH M. CEREBRALIS, NO SPORES OBSERVED IN HISTO; WHD 0/13
WILD	CROOKED RIVER	STEELHEAD	96-217A	5/29/96				+				-			INSPECTION	RS; ELISA 8/10 (2 high, 6 low) WHD 0/12, FAT 0/24
WILD	CROOKED RIVER	CHINOOK	96-217B	5/29/96				-				-			WILD FISH	NO PATHOGENS DETECTED; WHD 0/6, FAT 0/6
WILD	RED RIVER	CHINOOK	96-217C	5/29/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/4
WILD	RED RIVER	STEELHEAD	96-217D	5/29/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/3
WILD	KELLY CREEK	RAINBOW TROUT	96-360A	8/10/96								-			WILD FISH	NO PATHOGENS DETECTED; WHD 0/38
WILD	N F CLEARWATER	RAINBOW TROUT	96-360B	8/11/96								-			WILD FISH	HENNEGUYA 2/8 POOLS, WHD 0/34
WILD	WEITAS CREEK	RAINBOW TROUT	96-360C	8/12/96								-			WILD FISH	MYXOBOLUS SP. 1/6 (4-FISH POOLS) SPORES TOO LARGE FOR M. CEREBRALIS
3 SOUTHWEST REGION		D														
1995	HAYSPUR	RAINBOW TROUT	96-064	3/5/96					-	-	-				DIAGNOSTIC	GAS BUBBLE DISEASE/TRAUMA 1/1
1995	SECESH	CHINOOK	96-342	8/27/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/2
WILD	SECESH	BROOK TROUT	96-343	8/27/96								-			WILD FISH	NO MYXOBOLUS SPORES DETECTED; WHD 0/10
WILD	SECESH	BROOK TROUT	96-344	8/26/96								-			WILD FISH	NO MYXOBOLUS SPORES DETECTED; WHD 0/10
1995	LAKE CREEK	SUMMER CHINOOK	96-345	8/30/96								-			WILD FISH	NO PATHOGENS DETECTED; WHD 0/3
WILD	SECESH	BROOK TROUT	96-346	8/27/96								-			WILD FISH	NO PATHOGENS DETECTED; WHD 0/10
WILD	SECESH	BROOK TROUT	96-347	8/27/96								-			WILD FISH	NO MYXOBOLUS SPORES DETECTED; WHD 0/10
WILD	SECESH	BROOK TROUT	96-348	8/27/96								-			WILD FISH	NO MYXOBOLUS SPORES DETECTED; WHD 0/10
WILD	SECESH	BROOK TROUT	(9, 350)	8/27/96								-			WILD FISH	NO MYXOBOLUS SPORES DETECTED; WHD 0/10

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
BROOD	DEAD WOOD RESERVOIR	KOKANEE		96-358	9/10/96	-	-		+				-			INSPECTION	RS, FAT 0/60, VIRO 0/60, WHD 0/60, ELISA 5/12(5 FISH POOLS) low
1995	S F SALMON RIVER	SUMMER CHINOOK		96-535	10/1/96								-			WILD FISH	NO M.CEREBRALIS DETECTED; WHD 0/36
5 SOUTHEAST REGION		D															
	SNAKE RIVER/WOODVILLE	BROWN TROUT		96-384	7/30/96								-			INSPECTION	NO MYXOBOLUS SPORES DETECTED; WHD 0/6
	SNAKE RIVER/WOODVILLE	MOUNTAIN WHITEFISH		96-385	7/30/96								-			INSPECTION	NO MYXOBOLUS SPORES DETECTED; WHD 0/20
	SNAKE RIVER/WOODVILLE	RAINBOW TROUT		96-386	7/30/96								-			INSPECTION	NO MYXOBOLUS SPORES DETECTED; WHD 0/2
6 UPPER SNAKE REGION		D															
WILD	MACKAY RESERVOIR	KOKANEE		96-018	1/22/96								+			WILD FISH	M.CEREBRALIS CONFIRMED HISTOLOGICALLY, MYXOBOLUS SPP. 3/5 (4, 5 FISH POOLS)
WILD	MACKAY RESERVOIR	RAINBOW TROUT		96-019	1/22/96								+			WILD FISH	M.CEREBRALIS CONFIRMED HISTOLOGICALLY, MYXOBOLUS SPP. 1/1
7 SALMON REGION		D															
1994	MARSH CREEK	SPRING CHINOOK		96-032	1/1/96				-				-			WILD FISH	NO PATHOGENS DETECTED; FAT 0/1, WHD 0/1
WILD	WELCOME LAKE	WESTSLOPE CUTT TROUT		96-246	7/20/96	-	-		+				-			WILD FISH	RS, ELISA 1/1 (5-FISH POOLS) low, FAT 0/5, WHD 0/5, VIRO 0/5
WILD	GOLDEN TROUT LAKE	WESTSLOPE CUTT TROUT		96-247	7/20/96	-	-		+				-			WILD FISH	RS, VIRO 0/5, WHD 0/5, FAT 0/5, ELISA 1/1 (5-FISH POOL)
WILD	JORDAN CREEK	WESTSLOPE CUTT TROUT		96-254	7/25/96	-	-		+				-			WILD FISH	RS, WHD 0/24, VIRO 0/24, FAT 0/24, ELISA 5/6 POOLS (OD#S = 0.370, 0.192, 0.226, 0.252, 0.239, 0.091)
WILD	JORDAN CREEK	STEELHEAD		96-255	7/25/96	-	-		+				-			WILD FISH	RS, ELISA 1/1 (5-FISH POOLS) OD#S = 0.135, FAT 0/5, VIRO 0/5, WHD 0/5
WILD	JORDAN CREEK	BULL TROUT		96-256	7/26/96	-	-		+				-			WILD FISH	RS, ELISA 1/1 (3-FISH POOL) MOD (OD# .300), FAT 0/3, VIRO 0/3, WHD 0/3
WILD	GOLDEN TROUT LAKE	CUTTHROAT TROUT		96-267	8/10/96				+							WILD FISH	RS, ELISA 1/1 LOW
WILD	TOMAHAWK CREEK	CUTTHROAT TROUT		96-280	8/6/96				+				-			WILD FISH	RS, ELISA 6/10 (5-FISH POOLS) low, WHD 0/50
WILD	INDIAN CREEK	RAINBOW TROUT		96-281	8/6/96								-			WILD FISH	NO SPORES OF MYXOBOLUS SP. DETECTED; WHD 0/9
WILD	UPPER MIDDLE FORK	CUTTHROAT TROUT		96-282	8/7/96				+				-			WILD FISH	BKD ANTIGEN DETECTED IN ALL POOLED SAMPLES BY ELISA, HIGHEST POOL NEGATIVE BY FAT; ELISA 7/7 (1 low, 5 mod, 1 high), WHD 0/33, FAT 0/3
WILD	MARBLE CREEK	CUTTHROAT TROUT		96-283	8/7/96				+				-			WILD FISH	BKD ANTIGEN DETECTED BY ELISA, NOT FAT; ELISA 2/2 POOLS (1 MOD, 1 HIGH), WHD 0/7, FAT 0/3
WILD	MARBLE CREEK	RAINBOW TROUT		96-284	8/7/96								-			WILD FISH	NO SPORES SEEN IN DIGEST; WHD 0/14
WILD	UPPER CACHE CREEK	TROUT		96-285	8/9/96				+				-			WILD FISH	RS, ELISA 1/3 POOLS LOW, GOLDEN/CT POSITIVE FOR BKD ANTIGEN, 1/1 POOLS OF BROOKTROUT LOW, WHD 0/18
WILD	LOWER CACHE CREEK	CUTTHROAT TROUT		96-286	8/9/96				+				-			WILD FISH	MYXOBOLUS SP. CONFIRMED BY HISTO NOT CEREBRALIS, ELISA 3/3 (5-FISH POOLS) low, WHD 0/15
WILD	LOWER MIDDLE FORK	CUTTHROAT TROUT		96-287	8/10/96				+				-			WILD FISH	MYXOBOLUS SP. IN 2/4 DIGEST, NOT SEEN IN HISTO, FAT 0/8, ELISA 4/4 (4-FISH POOLS) 1 low, 1 mod, 2 high, WHD 0/16
WILD	WILSON CREEK	CUTTHROAT TROUT		96-288	8/11/96				+				-			WILD FISH	RENIBACTERIUM ANTIGEN DETECTED AT MODERATE LEVEL, ELISA 1/1 (3-FISH POOL) MOD, WHD 0/3

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
WILD	WILSON CREEK	RAINBOW TROUT		96-289	8/11/96								-			WILD FISH	MYXOBOLUS SP 1/7 SPORE SEEN IN DIGEST, COULD NOT CONFIRM M.CEREBRALIS IN CARTILAGE OR BONE. SPORES SEEN IN NERVOUS TISSUE, WHD 0/7
WILD	BIG CREEK	CUTTHROAT TROUT		96-290	8/12/96				+				-			WILD FISH	RENIBACTERIUM ANTIGEN DETECTED IN BOTH POOLS AT MODERATE LEVELS. SPORES OF MYXOBOLUS SP. SEEN IN 1/2 POOLS BY DIGEST BUT NOT HISTO; FAT 0/4, ELISA 2/2 mod, WHD 0/2
WILD	MIDDLE FORK/SALMON RVR	CUTTHROAT TROUT		96-291	8/12/96				+				-			WILD FISH	RENIBACTERIUM ANTIGEN IN ELISA 3/3 POOLS ALL LOW CONFIRMED POSITIVE BY PCR; FAT 0/5, ELISA 3/3 (2 mod, 1 high), WHD 0/30
AMERICAN FALLS HATCHERY		A															
1996	HAYSPUR	RAINBOW TROUT		96-154	4/15/96	-	-			-	-	+				DIAGNOSTIC	CWD; VIRO 0/8, F.PSYCHROPHILUS 8/8, PSEUDOMONAS SP 4/8
1995	HAYSPUR	RAINBOW TROUT		96-199	5/14/96	-	-			-	-	+				DIAGNOSTIC	CWD, SECONDARY BACTEREMIA 3/10, F.PSYCHROPHILUS 6/10, VIRO 0/8
ASHTON HATCHERY		B															
1994	COLORADO RIVER	RAINBOW TROUT		96-139	4/11/96	-	-		+	-	-	-	-			INSPECTION	RS, ELISA 2/12 (5-FISH POOLS) low, FAT 0/60, VIRO 0/60, WHD 0/60, BACTE 0/12
1996	HAYSPUR	RAINBOW TROUT		96-222	6/17/96	-	-			-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, WHD 0/20, BACTE 0/4
CABINET GORGE		C															
BROOD	SULLIVAN SPRINGS	KOKANEE		96-541	12/18/96	-	-		+	-	-	+	-			INSPECTION	CWD, MIXED BACTEREMIA, RS, FAT 0/60, ELISA 2/12 (5-FISH POOLS) LOW, VIRO 0/60, WHD 0/60
CLARK FORK HATCHERY		C															
1996	HAYSPUR	KAMLOOP RBT		96-202	5/14/96	-	-			-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
1991	CLARK FORK HATCHERY	CUTTHROAT TROUT		96-203	5/14/96	-	-		+							INSPECTION	BKD; FAT 7/50, VIRO 0/50
1992	CLARK FORK HATCHERY	CUTTHROAT TROUT		96-204	5/14/96	-	+		-							INSPECTION	IPNV; FAT 0/50, IPNV 1/50, IHN 0/50
1995	WYOMING	GRAYLING		96-396	9/24/96	-	-	-	-	-	-	-	-			DIAGNOSTIC	BACTEREMIA; ELISA 0/10, VIRO 0/10, EIBS 0/4, PKD 0/8, ENTEROCYTOZOON 0/8, PASTEURELLA AEROGENES
1995	HAYSPUR	KAMLOOP RBT		96-397	9/24/96	-	-		-	-	-	+				DIAGNOSTIC	CWD; FAT 0/5, ELISA 0/5, VIRO 0/5, F.PSYCHROPHILUS 4/4
1996	CLARK FORK HATCHERY	CUTTHROAT TROUT		96-398	9/24/96	-	+									DIAGNOSTIC	IPN; IHN 0/10, IPN 1/2 (5-FISH POOLS)
1996	CLARK FORK HATCHERY	CUTTHROAT TROUT		96-427	10/15/96					-	-	+				DIAGNOSTIC	CWD, PSEUDOMONAD SEPTICEMIA; F.PSYCHROPHILUS 7/8
1996	CLARK FORK HATCHERY	WESTSLOPE CUTT TROUT		96-548	12/30/96	-	+			-	-	+				DIAGNOSTIC	PSEUDOMONAS SEPTICEMIA, CWD, IPNV; IPN 2/2 (5-FISH POOLS), IHN 0/10, F.PSYCHROPHILUS 6/12, PSEUDOMONAS 6/12
CLEARWATER HATCHERY		C															
1993	SELWAY RIVER	SPRING CHINOOK		96-069	3/8/96				+							INSPECTION	RS, ELISA 1/1 low
1995	TROUT LODGE	RAINBOW TROUT		96-070	3/8/96	-	-			-	-	+				DIAGNOSTIC	CWD; VIRO 0/5, F.PSYCHROPHILUS 4/4
1994	POWELL	SPRING CHINOOK		96-071	3/8/96	-	-			-	-	+				INSPECTION	CWD; VIRO 0/10, FAT 0/10, F.PSYCHROPHILUS 1/4
1994	RAPID RIVER	SPRING CHINOOK		96-072	3/8/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4, FAT 0/10

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHM	IPN	EBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1995	DWORSHAK	STEELHEAD, B GROUP	96-099	3/20/96	-	-			-	-	-	-	-	-		INSPECTION	NO PATHOGENS DETECTED; FAT 0/20, VIRO 0/20, WHD, 0/20, CSH 0/20, BACTE 0/20
1995	DWORSHAK	STEELHEAD, B GROUP	96-100A	3/21/96	-	-			-	-	-	-	-	-		INSPECTION	NO PATHOGENS DETECTED; DFAT 0/10, VIRO 0/50, CSH 0/40, WHD 0/40, BACTE 0/40
1995	SELWAY	STEELHEAD, B GROUP	96-100B	3/21/96	-	-			-				-			INSPECTION	NO PATHOGENS FOUND; DFAT 0/60, VIRO 0/50, WHD 0/50
1995	DWOR X SELWAY	STEELHEAD, B GROUP	96-100C	3/21/96	-	-			-				-			INSPECTION	NO PATHOGENS FOUND; DFAT 0/60, WHD 0/45, VIRO 0/50
1994	SELWAY	STEELHEAD, B GROUP	96-100D	3/21/96	-	-			-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/100, VIRO 0/65
1994	DWORSHAK	STEELHEAD, B GROUP	96-100E	3/21/96	-	-			-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/62, VIRO 0/65
1994	POWELL	SPRING CHINOOK	96-149	4/11/96	-	-			+				-			INSPECTION	RS, ELISA 4/4 low, FAT 0/20, VIRO 0/20, WHD 0/20
1994	RAPID RIVER	SPRING CHINOOK	96-150	4/11/96	-	-			+				-			INSPECTION	RS, VIRO 0/20, WHD 0/20, DFAT 6/20, ELISA 4/4 (5-FISH POOLS) 3 LOW, 1 HIGH
1994	CROOKED RIVER	SPRING CHINOOK	96-170	4/18/96	-	-			+	-	-	-	-			INSPECTION	RS, VIRO 0/80, WHD 0/80, ELISA 5/16 (5-FISH POOLS), BACTE 0/64, DFAT 0/54
1995	HAYSPUR	RAINBOW TROUT	96-224	6/20/96	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE 0/8
1995	RAPID RIVER	SPRING CHINOOK	96-225	6/20/96	-	-			-	-	-	-				INSPECTION	PSUEDOMONAS PAUCMOBILIS 2/8, VIRO 0/10, FAT 0/10
1996	N. F. CLEARWATER	STEELHEAD, B GROUP	96-244	7/16/96	-	-			-	-	-	-				DIAGNOSTIC	MAS, VIRO 0/12, ACINETOBACTER 3/13, PS.FLUORESCENS 5/13, PS.MALTOPHILA 1/13
1996	DWORSHAK	STEELHEAD, B GROUP	96-264	8/7/96	-	-			-	-	-	-				INSPECTION	MAS, VIRO 0/10, AEROMONAS HYDROPHILA 2/8
1992	SELWAY	SPRING CHINOOK	96-304	8/20/96					+							INSPECTION	RS, ELISA 4/8 (2 low, 2 high) OD#S 156, 156, 1 713, 3 672
BROOD	SELWAY	SPRING CHINOOK	96-337	8/30/96	-	-			+							INSPECTION	RS, VIRO 0/1, ELISA 1/8 low
BROOD	SELWAY	SPRING CHINOOK	96-355	9/6/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1
BROOD	SELWAY	SPRING CHINOOK	96-363	9/10/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1
BROOD	SELWAY	SPRING CHINOOK	96-372	9/12/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	SELWAY	SPRING CHINOOK	96-377	9/16/96	-	-			+							INSPECTION	RS, VIRO 0/3, FAT 0/10, ELISA 18/41 (15 low, 3 high)
BROOD	SELWAY	SPRING CHINOOK	96-399	9/20/96	-	-			+							INSPECTION	RS, ELISA 4/9 LOW OD, VIRO 0/2
BROOD	SELWAY	SPRING CHINOOK	96-400	9/23/96	-	-			+							INSPECTION	RS, ELISA 2/4 LOW OD, VIRO 0/1
1996	DWORSHAK	STEELHEAD, B GROUP	96-402	9/25/96	-	-			-	-	-	+				INSPECTION	CWD, MAS, FAT 0/10, A.HYDROPHILA 2/8, F.PSYCHROPHILUS 2/8, VIRO 0/10
BROOD	SELWAY	CHINOOK	96-409	9/30/96	-	-			+							INSPECTION	RS, VIRO 0/1, ELISA 3/6 (2 LOW, 1 HIGH) OD#S = 0 216, 0 128, 0 394
1996	N. F. CLEARWATER	STEELHEAD, B GROUP	96-486	11/14/96	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/8, VIRO 0/10
1996	HAYSPUR	RAINBOW TROUT	96-487	11/14/96	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/8, VIRO 0/4
CROOKED RIVER		C															
1994	CROOKED RIVER	SPRING CHINOOK	96-129	4/4/96	-	-			+				-			INSPECTION	RS, ELISA 1/2 (5-FISH POOLS) LOW, DFAT 0/10, VIRO 0/10, WHD 0/10

LOCATION		Class	Log #	Sample Date	IHN	IPN	EIS	BKD	FUR	ERM	CWD	WHD	CSH	ICH	ExamType	Diagnoses
BroodYr	Stock	Species														
1994	SELWAY	STEELHEAD, B GROUP	96-130	4/4/96	-	-		+				-			INSPECTION	RS, ELISA 1/2 (5-FISH POOLS) LOW, DFAT 0/10, VIRO 0/10, WHD 0/10
1992	CROOKED RIVER	SPRING CHINOOK	96-272	8/7/96									+		INSPECTION	C SHASTA; CERATOMYXA 1/4
BROOD	CROOKED RIVER	SPRING CHINOOK	96-297	8/15/96	-	-		+					-		INSPECTION	RS, C SHASTA 0/3, ELISA 1/1 HIGH, VIRO 0/1
	CROOKED RIVER	SPRING CHINOOK	96-303	8/20/96									-		INSPECTION	NO PATHOGENS DETECTED; C SHASTA 0/1
BROOD	CROOKED RIVER	SPRING CHINOOK	96-311	8/22/96	-	-		+					-		INSPECTION	RS, C SHASTA 0/1, ELISA 2/3 LOW, VIRO 0/3
BROOD	CROOKED RIVER	SPRING CHINOOK	96-317	8/26/96	-	-		+					+		INSPECTION	RS, C SHASTA 2/2, ELISA 5/6 (5 low, 1 high), VIRO 0/6
BROOD	CROOKED RIVER	SPRING CHINOOK	96-334	8/29/96	-	-		+							INSPECTION	RS, ELISA 4/4 (1 low, 3 high), VIRO 0/4
BROOD	CROOKED RIVER	SPRING CHINOOK	96-336	9/3/96	-	-		+							INSPECTION	RS, ELISA 14/15 (2 high, 12 low), VIRO 0/15
BROOD	CROOKED RIVER	SPRING CHINOOK	96-353	9/6/96	-	-		+							INSPECTION	RS, VIRO 0/13, ELISA 2/13 (1 low, 1 mod)
BROOD	CROOKED RIVER	SPRING CHINOOK	96-362	9/10/96	-	-		+							INSPECTION	RS, VIRO 0/16, ELISA 10/16 (9 low, 1 high) OD'S = 0 122, 0 116, 0 137, 0 104, 0 118, 0 145, 0 117, 0 106, 0 141, 1 118
BROOD	CROOKED RIVER	SPRING CHINOOK	96-370	9/13/96	-	-		+					-		INSPECTION	RS, ELISA 8/10 (7 low, 1 HIGH), VIRO 0/10, WHD 0/22
BROOD	CROOKED RIVER	SPRING CHINOOK	96-376	9/17/96	-	-		+							INSPECTION	RS, VIRO 0/5, ELISA 4/5 low
DWORSHAK NFH		C														
BROOD	DWORSHAK	STEELHEAD, B GROUP	96-078	3/12/96	+	-									INSPECTION	IHNV 3/21 FROM STB SPAWNED AT DWORSHAK HATCHERY
BROOD	DWORSHAK	STEELHEAD, B GROUP	96-093	3/20/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/30
BROOD	DWORSHAK	STEELHEAD, B GROUP	96-112	3/26/96	+	-									INSPECTION	IHNV, IPN 0/40, IHNV 2/40
BROOD	DWORSHAK	STEELHEAD, B GROUP	96-125	4/2/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/40
BROOD	DWORSHAK	STEELHEAD, B GROUP	96-146	4/9/96	+	-									INSPECTION	IHN, IHNV 11/40, IPN 0/40
EAGLE HATCHERY		D														
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-006A	1/7/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-006B	1/7/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-008A	1/11/96				-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, BACTE 0/1
OM93	RED FISH LAKE	SOCKEYE SALMON	96-008B	1/11/96				-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-010	1/14/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
BY93	RED FISH LAKE	SOCKEYE SALMON	96-011	1/15/96				-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-023	1/25/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-024	1/25/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-033	1/31/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-040	2/9/96				-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/3, BACTE 0/3
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-041	2/11/96				-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/4, BACTE 0/4

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-044	2/15/96												RESEARCH	LYMPHO SARCOMA SAMPLE SENT TO CORNELL UNIVERSITY NO RESULTS TO REPORT
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-048	2/20/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-049	2/21/96					-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-056	2/23/96					-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-060	3/1/96		-	-		-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, BACTE 0/1, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-061	3/3/96		-	-		-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, BACTE 0/1, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-062	3/4/96		-	-	-	-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; EIBS 0/1, VIRO 0/1, BACTE 0/1, ELISA 0/1, FAT 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-065	3/6/96		-	-	-	-	-	-	+				DIAGNOSTIC	CWD; VIRO 0/1, EIBS 0/1, ELISA 0/1, FLEXIBACTER PSYCHROPHILUS 1/1
REBY93	RED FISH LAKE	SOCKEYE SALMON	96-073	3/8/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-081	3/15/96		-	-		-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-085	3/15/96		-	-		-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-101	3/26/96					-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, FAT 0/1, BACTE 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-102	3/25/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, FAT 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-118	3/29/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-126	4/4/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-133	4/5/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-134	4/16/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-147	4/10/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-148	4/11/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-162	4/19/96					-							DIAGNOSTIC	NO SIGNS OF ENTERSCYTOZOAN SALMONIS (BETH MCCONNEL); ELISA 0/1
OM93	RED FISH LAKE	SOCKEYE SALMON	96-164	4/20/96					-							DIAGNOSTIC	CARCINOMA ORIGIN UNKNOWN, PROBABLY NOT KIDNEY (BETH MCCONNEL)
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-165	4/21/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-174	4/25/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
OMBY93	RED FISH LAKE	SOCKEYE SALMON	96-177	4/28/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-178	4/28/96					-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, BACTE 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-191	5/4/96					-							DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-192	5/6/96												DIAGNOSTIC	INTESTINAL PATHOLOGY INDICATIVE OF STARVATION OR INGESTION OF MILD TOXICANT (BETH MCCONNEL)
BY94	EAST FORK SALMON RIVER	CHINOOK	96-194	5/7/96						-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; BACTE 0/1

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
BY94	EAST FORK SALMON RIVER	CHINOOK		96-205	5/20/96				+				+			WILD FISH	WHD, RS, M.CEREBRALIS 6/14 (3-FISH POOLS), ELISA 2/14 (3-FISH POOLS) (LOW OD#S = 0.110, 0.104)
BY94	LEMHI RIVER	CHINOOK		96-206	5/20/96	-	-		+	-	-	-	+			WILD FISH	RS, WHD, ELISA 13/14 (3-FISH POOLS) (OD#S = 0.138, 0.106, 0.116, 0.172, 0.121, 0.102, 0.110, 0.193, 0.106, 0.158, 0.194, 0.127, 0.202), M.CEREBRALIS 9/14 (3-FISH POOLS)
BY94	YANKEE FORK RIVER	CHINOOK		96-207	5/20/96				+				-			WILD FISH	RS, ELISA 7/12 (3-FISH POOLS) (OD#S = 0.120, 0.106, 0.105, 0.158, 0.131, 0.103, 0.265), WHD 0/36
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-213	5/28/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-227	6/24/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
OMBY93	RED FISH LAKE	SOCKEYE SALMON		96-233	7/1/96											DIAGNOSTIC	NEGATIVE FOR PKX AND ENTEROCYTOZOOM
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-241	4/12/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-243	7/16/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1, NO SIGNS OF ENTEROCYTOZOOM
OM93	RED FISH LAKE	SOCKEYE SALMON		96-245	7/18/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/2
BY91	RED FISH LAKE	SOCKEYE SALMON		96-257	7/29/96											DIAGNOSTIC	NO PATHOGENS DETECTED
BY94	RED FISH LAKE	SOCKEYE SALMON		96-259	7/30/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-268	8/12/96				-	-	-	-				DIAGNOSTIC	UNDETERMINED ETIOLOGY, ELISA 0/2
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-270	8/12/96				+							DIAGNOSTIC	RS, ELISA 1/1 MOD OD# = 0.298, FAT 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-276	8/14/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/2
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-292	8/16/96				-	-	-					DIAGNOSTIC	NO PATHOGENS DETECTED, BACTE 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-295	8/18/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/2
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-299	8/20/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
BY94	EAST FORK SALMON RIVER	CHINOOK		96-307	8/26/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED, WHD 0/2, VIRO 0/2, ELISA 0/2
1994	LEMHI RIVER	CHINOOK		96-308	8/26/96	-	-		-				+			WILD FISH	WHD (PREVIOUSLY CONFIRMED BY HISTO), M.CEREBRALIS 1/4, VIRO 0/4, ELISA 0/4
1994	YANKEE FORK RIVER	CHINOOK		96-309	8/26/96	-	-						-			WILD FISH	NO PATHOGENS DETECTED, ELISA 0/4, VIRO 0/4, WHD 0/4
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-313	8/27/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-319	8/28/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-328	8/31/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-349	9/8/96				-							DIAGNOSTIC	ETIOLOGY UNDETERMINED, ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-375	9/18/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
BY93	RED FISH LAKE	SOCKEYE SALMON		96-380	9/20/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1, FAT 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON		96-382	9/21/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON		96-383	9/23/96				-							DIAGNOSTIC	NO PATHOGENS DETECTED, ELISA 0/1

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
WILD	RED FISH LAKE	SOCKEYE SPAWNER	96-406	9/28/96	-	-		+					-			INSPECTION	RS, MYXOBOLUS SPP. 1/1, ELISA 1/1 LOW OD 0.121, VIRO 0/1 (ANADROMOUS FEMALE), WHD 0/1
OMBY93	RED FISH LAKE	SOCKEYE SALMON	96-411	10/3/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/2, VIRO 0/2
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-413	10/5/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-414	10/8/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
BY94	EAST FORK SALMON RIVER	CHINOOK	96-416	1/4/96									-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/2
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-420A	10/10/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/4, VIRO 0/4
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-420B	10/10/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/2, VIRO 0/2
OM93	RED FISH LAKE	SOCKEYE SPAWNER	96-420C	10/10/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-423	10/11/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-425	10/15/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/7, VIRO 0/7
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-428	10/17/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-431A	10/18/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/2, VIRO 0/2
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-431B	10/18/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-434A	10/21/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/3, VIRO 0/3
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-434B	10/21/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/3, VIRO 0/3
	LEMHI RIVER	CHINOOK	96-436	10/22/96	-	-		+	-	-	-	-	+			WILD FISH	RS, WHD (PREVIOUSLY CONFIRMED BY HISTO), ELISA 1/1 LOW OD# 0.103, VIRO 0/1, BACTE 0/1, M. CEREBRALIS 1/1
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-439A	10/24/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/12, VIRO 0/12
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-439B	10/24/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/3, VIRO 0/3
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-441A	10/28/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/20, VIRO 0/20
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-441B	10/28/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/5, VIRO 0/5
REBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-441C	10/28/96	-	-		-								INSPECTION	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-442	10/29/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-443	10/29/96	-	-		+								DIAGNOSTIC	RS; ELISA 1/14 LOW OD# 0.143, VIRO 0/14 (CRYO DONORS)
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-444	10/29/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/4
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-453	10/31/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/5, VIRO 0/5
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-454	10/31/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/3, VIRO 0/3
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-456	11/4/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/7, VIRO 0/7
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-457	11/4/96	-	-		-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/3, VIRO 0/3
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-459	11/4/96				-								DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-464	11/5/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/2, VIRO 0/2, (CRYO PRESERVED MALES)
OMBY93	RED FISH LAKE	SOCKEYE SALMON	96-465	11/5/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/5, ELISA 0/5, (CRYO PRESERVED MALES)
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-470	11/7/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/4, ELISA 0/4
OMBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-471	11/7/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-472	11/8/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/5, VIRO 0/5
OMBY93	RED FISH LAKE	SOCKEYE SALMON	96-473	11/8/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/4, VIRO 0/4
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-474	11/8/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-475	11/8/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-480	11/13/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-483	11/14/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/3
ANBY93	RED FISH LAKE	SOCKEYE SPAWNER	96-489	11/15/96	-	-										INSPECTION	NO PATHOGENS DETECTED; ELISA 0/4, VIRO 0/4
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-490	11/18/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-496	11/20/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/2
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-499	11/22/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-500	11/25/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-504	12/1/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-510	12/6/96	-	-										DIAGNOSTIC	OPEN CASE AWAITING HISTO; ELISA 0/5, VIRO 0/5
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-514	12/10/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-543	12/26/96												DIAGNOSTIC	OPEN CASE, AWAITING HISTO
ANBY94	RED FISH LAKE	SOCKEYE SALMON	96-545	12/29/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
ANBY93	RED FISH LAKE	SOCKEYE SALMON	96-546	12/26/96												DIAGNOSTIC	NO PATHOGENS DETECTED; ELISA 0/1
EAGLE WET LAB		D															
1994	HAYSPUR	RAINBOW TROUT	96-012	1/16/96						-	-	-				DIAGNOSTIC	BACTERIAL SEPTICEMIA 1/1
1993	HAYSPUR	RAINBOW TROUT	96-014	1/18/96						-	-	-	-			DIAGNOSTIC	BACTERIAL SEPTICEMIA 2/4; FAT 0/4, ELISA 0/4
1994	HAYSPUR	RAINBOW TROUT	96-027	1/29/96												RESEARCH	NO PATHOGENS DETECTED; FAT 0/60, ELISA 0/60
1994	HAYSPUR	RAINBOW TROUT	96-039	2/8/96												RESEARCH	NO PATHOGENS DETECTED; ELISA 0/10, FAT 0/11
1995	WESTSLOPE	CUTTHROAT TROUT	96-132	4/5/96						-	-	-	+			DIAGNOSTIC	CWD, MAS, PSEUDOMONAD SEPTICEMIA; ELISA 0/2, CWD 2/2, FAT 0/2
1994	DEAD WOOD RESERVOIR	KOKANEFF	96-168	4/22/96												RESEARCH	NO PATHOGENS DETECTED; ELISA 0/30, FAT 0/30
1993	HAYSPUR	RAINBOW TROUT	96-214	6/11/96	-	-			+	-	-	-				RESEARCH	RS, ELISA 1/20 bw OD# 0.105, DFAT 0/20, VIRO 0/20, BACTE 0/8

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1995	WYOMING	GRAYLING		96-230	6/26/96	-	-			-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/1, BACTE 0/1
1994	HAYSPUR	RAINBOW TROUT		96-407	9/30/96				-							RESEARCH	NO PATHOGENS DETECTED; ELISA 0/6
1994	DEAD WOOD RESERVOIR	KOKANEE		96-503	11/27/96	-	-		-	-	-	+				INSPECTION	CWD, MAS, VIRO 0/1, ELISA 0/5, AEROMONAS HYDROPHILA 1/1, FLEXIBACTER PSYCHROPHILUS 1/1
1994	HAYSPUR	RAINBOW TROUT		96-511	12/6/96				-							RESEARCH	NO PATHOGENS DETECTED; FAT 0/30, ELISA 0/30
1995	HAYSPUR	RAINBOW TROUT		96-547	12/31/96				-							RESEARCH	NO PATHOGENS DETECTED; ELISA 0/55
GRACE HATCHERY		B															
1995	HAYSPUR	KAMLOOP RBT		96-051	2/22/96	-	-		+	-	-	+				DIAGNOSTIC	CWD, RS, VIRO 0/5, F. PSYCHROPHILUS 1/4, ELISA 1/1 (5-FISH POOL) <i>low</i>
1995	HAYSPUR	RAINBOW TROUT		96-052	2/22/96	-	-		+	-	-	+				DIAGNOSTIC	MAS, CWD, RS, ELISA 1/1 (2-FISH POOL) <i>low</i> , F. PSYCHROPHILUS 1/2, AEROMONAS 1/2, VIRO 0/2
1995	MT LASSEN	RAINBOW TROUT		96-193	5/6/96					-	-	-				DIAGNOSTIC	BACTERIAL GILL DISEASE, MULTIPLE PARASITISM (GYRODACTYLUS 2/4, HEXAMITA 1/4)
1995	MT LASSEN	RAINBOW TROUT		96-242	7/14/96					-	-	-				DIAGNOSTIC	BACTERIAL GILL DISEASE 1/1
1996	HAYSPUR	RAINBOW TROUT		96-258	7/29/96					-	-	-				DIAGNOSTIC	BACTERIAL GILL DISEASE 1/2, FLEXIBACTER 0/4
HAGERMAN SFH		C															
1996	HAYSPUR	RAINBOW TROUT		96-021	1/24/96	-	-			-	-	-				INSPECTION	COSTIASIS; VIRO 0/10, BACTE 0/10
1996	ARLEE	RAINBOW TROUT		96-022	1/24/96					-	-	-				INSPECTION	MAS, SUSPECT FUNGUS FROM ORGANS PROBABLY A SAPROLEGNIA; AEROMONAS 1/4
1996	HAYSPUR	RAINBOW TROUT		96-067	3/7/96	-	-			-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; BACTE 0/4, VIRO 0/10
1995	HAYSPUR	RAINBOW TROUT		96-068	3/7/96	+	-			-	-	+				DIAGNOSTIC	IHN, CWD; IHNV 1/1 (5-FISH POOL), F. PSYCHROPHILUS 4/4
1995	HAYSPUR	RAINBOW TROUT		96-077	3/12/96	+	-			-	-	+				DIAGNOSTIC	IHN, CWD; IHNV 2/2 (5-FISH POOLS), F. PSYCHROPHILUS 2/8
1996	COLORADO RIVER	RAINBOW TROUT		96-094	3/20/96											DIAGNOSTIC	COTIASIS
1996	HAYSPUR	RAINBOW TROUT		96-095	3/20/96	-	-			-	-	-				DIAGNOSTIC	COSTIASIS, BACTEREMIA; VIRO 0/15, BACTE 0/4
1995	HAYSPUR	KAMLOOP RBT		96-096	3/20/96	-	-			-	-	+				DIAGNOSTIC	MAS, COLUMNARIS, CWD; VIRO 0/10, F. PSYCHROPHILUS 1/8, F. COLUMNARIS 4/8
1995	HENRY'S LAKE	RAINBOW X CUTTH HYBRID		96-097	3/20/96	-	-			-	-	-				DIAGNOSTIC	MAS, COLUMNARIS; VIRO 0/10, AEROMONAS HYDROPHILA 3/8, F. COLUMNARIS 4/8
1995	HAYSPUR	KAMLOOP RBT		96-122	4/2/96	+	-			-	-	+				DIAGNOSTIC	CWD, IHNV, BGD; F. COLUMNARIS 1/7, F. PSYCHROPHILUS 5/7, IHNV 2/2 POOLS, IPN 0/7
1996	HAYSPUR	RAINBOW TROUT		96-179	4/29/96	-	-			-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; BACTE 0/4, VIRO 0/5
1995	HAYSPUR	KAMLOOP RBT		96-180	4/29/96	+	-			-	-	-				DIAGNOSTIC	IHN; F. COLUMNARIS 2/4, IHNV 1/1 (5-FISH POOL), IPN 0/5
1995	HAYSPUR	RAINBOW TROUT		96-181	4/29/96	+	-									DIAGNOSTIC	IHN; IHNV 1/1 (5-FISH POOL), IPN 0/5
1996	HAYSPUR	RAINBOW TROUT		96-208	5/21/96					-	-	-				DIAGNOSTIC	COLUMNARIS, MAS, F. COLUMNARIS 4/4, AEROMONAS HYDROPHILA 3/4, AEROMONAS CAVIAE 2/4
1996	HAYSPUR	RAINBOW TROUT		96-209	5/22/96	-	-			-	-	-				DIAGNOSTIC	COLUMNARIS, VIRO 0/8, F. COLUMNARIS 2/8

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1995	TROUT LODGE	KAMLOOP RBT		96-210A	5/21/96											RESEARCH	SANGUINICOLA (PRESUMPTIVE) 17/30 (3 HIGH, 7 MOD, 7 LOW);
1995	TROUT LODGE	KAMLOOP RBT		96-210B	6/18/96											RESEARCH	SANGUINICOLA 24/31 (PRESUMPTIVE) 11 HIGH, 11 MOD, 2 LOW
1995	TROUT LODGE	KAMLOOP RBT		96-210C	7/16/96											RESEARCH	SANGUINICOLA 9/32 (PRESUMPTIVE) 3 HIGH, 4 MOD, 2 LOW
1995	TROUT LODGE	KAMLOOP RBT		96-210D	8/14/96											RESEARCH	SANGUINICOLA 8/31 (PRESUMPTIVE) 1 HIGH, 4 MOD, 3 LOW
1995	TROUT LODGE	KAMLOOP RBT		96-210E	10/10/96											RESEARCH	SANGUINICOLA 18/30 (PRESUMPTIVE) 5 HIGH, 6 MOD, 7 LOW
1996	HAYSPUR	RAINBOW TROUT		96-223	6/18/96	+	-			-	-	-				DIAGNOSTIC	IHN, IHN 2/2 (5-FISH POOLS), IPN 0/10, BACTE 0/8
1996	HAYSPUR	RAINBOW TROUT		96-228	6/25/96	+	-			-	-	+				DIAGNOSTIC	IHN, CWD; IHN 1/2 (5-FISH POOLS), F PSYCHROPHILUS 7/8
1996	COLORADO RIVER	RAINBOW TROUT		96-229	6/25/96	-	-			-	-	+				DIAGNOSTIC	CWD; F PSYCHROPHILUS 7/8, VIRO 0/10
1996	TROUT LODGE	KAMLOOP RBT		96-234	7/3/96					-	-	+				DIAGNOSTIC	CWD; F PSYCHROPHILUS 4/4
1996	SAWTOOTH	STEELHEAD, A GROUP		96-235	7/3/96	-	-			-	-	-				DIAGNOSTIC	MAS; AEROMONAS HYDROPHILA 2/4, VIRO 0/5
1996	TROUT LODGE	KAMLOOP RBT		96-412	10/3/96	-	-			-	-	-				DIAGNOSTIC	MAS; VIRO 0/15, AEROMONAS HYDROPHILA
1996	TROUT LODGE	KAMLOOP RBT		96-421	10/10/96	-	-			-	-	-				INSPECTION	EXTERNAL AEROMONAD INFECTION; VIRO 0/5, AEROMONAS SOBRIA 2/4
1996	TROUT LODGE	KAMLOOP RBT		96-422	10/10/96					-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4
HAYSPUR HATCHERY		C															
BROOD	HAYSPUR	KAMLOOP RBT		96-003	1/4/96	-	-		+							INSPECTION	RS, VIRO 0/14, ELISA 3/20 (1 LOW, 2 MOD), FAT 0/20, MFAT 0/14
BROOD	COLORADO RIVER	RAINBOW TROUT		96-007	1/9/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; ELISA 0/31, DFAT 0/30, MFAT 0/50, VIRO 0/50
BROOD	COLORADO RIVER	RAINBOW TROUT		96-013	1/17/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; MFAT 0/50, VIRO 0/50
BROOD	COLORADO RIVER	RAINBOW TROUT		96-020	1/24/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; VIRO 0/40, MFAT 0/40
BROOD	COLORADO RIVER	RAINBOW TROUT		96-035	2/6/96	-	-		+							INSPECTION	RS, VIRO 0/20, MFAT 1/20
1994	HAYSPUR	RAINBOW TROUT		96-368	9/12/96	-	-		+							INSPECTION	RS, FAT 0/60, VIRO 0/60, WHD 0/60, ELISA 11/60 (10 LOW, 1 HIGH)
1994	HAYSPUR	KAMLOOP RBT		96-379	9/17/96	-	-		+							INSPECTION	RS, FAT 0/60, ELISA 6/60 low, VIRO 0/60
BROOD	HAYSPUR	RAINBOW TROUT		96-426	10/16/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; ELISA 0/10, FAT 0/10, MFAT 0/20, VIRO 0/20
	LOVING CREEK	RAINBOW TROUT		96-446	10/3/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 2/20
BROOD	HAYSPUR	RAINBOW TROUT		96-452	10/30/96	-	-		+							INSPECTION	RS, FAT 0/10, ELISA 3/10 LOW, VIRO 0/30, MFAT 0/30 (FEMALES #23, 24, 29)
FERAL	HAYSPUR	RAINBOW TROUT		96-468	11/6/96	-	-		+							INSPECTION	RS, ELISA 1/1 MOD, MFAT 0/1, FAT 0/1, VIRO 0/1
BROOD	HAYSPUR	RAINBOW TROUT		96-469	11/6/96	-	-		+							INSPECTION	RS, ELISA 1/10 LOW (FEMALE #57), FAT 0/10, MFAT 2/48 (FEMALES # 72 & 100), VIRO 0/49
FERAL	HAYSPUR	RAINBOW TROUT		96-497	11/21/96	-	-		+							INSPECTION	RS, ELISA 2/2 (1 LOW, 1 HIGH), FAT 0/2, MFAT 0/1, VIRO 0/1 WHD 0/2

LOCATION		Class		Log #	Sample Date	IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH	ExamType	Diagnoses
BroodYr	Stock	Species															
BROOD	HAYSPUR	RAINBOW TROUT		96-498	11/21/96	-	-		+							INSPECTION	RS, ELISA 0/10, FAT 0/10, MFAT 1/48, VIRO 0/49
BROOD	HAYSPUR	RAINBOW TROUT		96-506	12/5/96	-	-		+							INSPECTION	RS, ELISA 2/10(Low), FAT 0/10, MFAT 1/30, VIRO 0/30
FERAL	HAYSPUR	RAINBOW TROUT		96-507	12/5/96				+				-			INSPECTION	RS, ELISA 2/2 LOW, FAT 0/2, WHD 0/2
BROOD	HAYSPUR	KAMLOOP RBT		96-519	12/10/96	-	-		+							INSPECTION	RS, ELISA 3/30 LOW OD'S, FAT 0/16, VIRO 0/30, MFAT 2/28
BROOD	HAYSPUR	RAINBOW TROUT		96-536	12/18/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, ELISA 0/10, VIRO 0/20, MFAT 0/20
BROOD	HAYSPUR	KAMLOOP RBT		96-542	12/23/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/11, ELISA 0/25, VIRO 0/25, MFAT 0/25
BROOD	COLORADO RIVER	RAINBOW TROUT		96-549	12/31/96	-	-		+							INSPECTION	RS, ELISA 1/22 LOW, MFAT 0/50, VIRO 0/26, FAT 0/50
HENRY'S LAKE		C															
1995	HENRY'S LAKE	BROOK TROUT		96-053	2/23/96											DIAGNOSTIC	HISTOPATH RESULTS: EXTENSIVE EPITHELIAL/CAPILLARY SEPARATION IN THE GILLS. CONGESTION IN LIVER SUGGEST POSSIBLE HEAVY METAL TOXICITY OR MAY BE RESPONSE TO GBD
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-074	3/8/96				-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/100
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-075	3/8/96				-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/90
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-082	3/15/96				-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/80
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-083	3/15/96				-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/110
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-084	3/15/96				+							INSPECTION	RS, FAT 1/32 (5-FISH POOLS)
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-090	3/15/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/150
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-091	3/18/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/90
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-092	3/18/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/40
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-107	3/20/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/135
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-108	3/22/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/150
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-109	3/23/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/150
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-123	3/29/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/80, VIRO 0/80
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-124	3/27/96	-	-		+							INSPECTION	RS, VIRO 0/110, DFAT 1/22 (5-FISH POOLS)
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-140	4/3/96	-	-									INSPECTION	NO VIRUSES DETECTED; VIRO 0/10
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-141	4/5/96				-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/80
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-142	4/9/96	-	-		+	-	-	-	+			INSPECTION	WHD CONFIRMED BY HISTO, RS, BACTEREMIA (MIXED), ELISA 12/12 (5-FISH POOLS) low OD# 120, 132, 110, 232, 127, 113, 114, 170, 170, 115, 142, 116, FAT 0/60, VIRO 0/60, MYXOBOLUS SPORES DETECTED IN 4/12 POOLS BY DIGEST, HISTO OF HEAVIEST POOL DETECTED SPORES IN CARTILAGE CONFIRMING WHD, BACTE 0/12
BROOD	HENRY'S LAKE	CUTTHROAT TROUT		96-157	4/10/96				-							INSPECTION	NO PATHOGENS DETECTED; DFAT 0/170

LOCATION		Class		Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species	Log #		IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1995	DWORSHAK	STEELHEAD, B GROUP	96-114	3/28/96	-	-		+				-			INSPECTION	RS, VIRO 0/20, ELISA 1/4 (5 FISH POOLS) low, FAT 0/20, WHD 0/20
1995	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-115	3/28/96	-	-		+				-			INSPECTION	RS, VIRO 0/20, ELISA 3/4 (5-FISH POOLS) 1 HIGH, 2 low, FAT 0/20, WHD 0/20
1995	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-116	3/28/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/20, FAT 0/20, VIRO 0/20, WHD 0/20
1994	DWORSHAK	STEELHEAD, B GROUP	96-117	3/28/96				+				-			INSPECTION	RS, ELISA 3/3 (1 HIGH, 2 low), WHD 0/3
1994	DWORSHAK	STEELHEAD, B GROUP	96-182	4/29/96				+							INSPECTION	RS, ELISA 4/4 (3 high, 1 low), FAT 0/12
1996	DWORSHAK	STEELHEAD, B GROUP	96-220	6/18/96	-	-			-	-	+				DIAGNOSTIC	CWD, VIRO 0/20, F.PSYCHROPHILUS 4/4
1996	DWORSHAK	STEELHEAD, B GROUP	96-239	7/10/96	-	-			-	-	+				DIAGNOSTIC	CWD, MAS, F PSYCHROPHILUS 6/3, VIRO 0/20, AEROMONAS HYDROPHILA 2/8
1996	SAWTOOTH	STEELHEAD, A GROUP	96-260	7/30/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
1996	EAST FORK	STEELHEAD, B GROUP	96-261	7/30/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	DWORSHAK	STEELHEAD, B GROUP	96-269	8/12/96	-	-			-	-	-				DIAGNOSTIC	CWD, MAS, VIRO 0/10, A.HYDROPHILA 1/4
1996	SAWTOOTH	STEELHEAD, A GROUP	96-391	9/25/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, VIRO 0/10
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-392	9/25/96					-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, VIRO 0/10
1996	DWORSHAK	STEELHEAD, B GROUP	96-393	9/25/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, VIRO 0/10
1996	EAST FORK	STEELHEAD, B GROUP	96-394	9/25/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, VIRO 0/10
1996	DWORSHAK	STEELHEAD, B GROUP	96-460	11/4/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	EAST FORK	STEELHEAD, B GROUP	96-461	11/4/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-462	11/4/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	SAWTOOTH	STEELHEAD, A GROUP	96-463	11/4/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	SAWTOOTH	STEELHEAD, A GROUP	96-515	12/10/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4 NSG, VIRO 0/10
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-516	12/10/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4 NSG
1996	DWORSHAK	STEELHEAD, B GROUP	96-517	12/10/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE NSG 0/4, VIRO 0/10
1996	EAST FORK	STEELHEAD, B GROUP	96-518	12/10/96	-	-			-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE NSG 0/4, VIRO 0/10
MCCALL HATCHERY		C														
1994	S.F. SALMON RIVER	SUMMER CHINOOK	96-002	1/3/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, VIRO 0/10, BACTE 0/4
1994	S.F. SALMON RIVER	SUMMER CHINOOK	96-042	2/13/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE 0/4
1994	SOUTH FORK	SUMMER CHINOOK	96-089	3/19/96	-	-		+							INSPECTION	BKD, DFAT 10/10, VIRO 0/10, HBKD GROUP
1994	SOUTH FORK	SUMMER CHINOOK	96-098	3/20/96	-	-		+				-			INSPECTION	RS, ELISA 2/4 (5-FISH POOLS), FAT 0/20, VIRO 0/20, WHD 0/20
BROOD	FISH LAKE	WESTSLOPE CUTT TROUT	96-187	5/2/96	-	-		+				-			INSPECTION	RS, EPITHELIAL PAPILLOMA, VIRO 0/39, ELISA 8/10 low, DFAT 0/39, WHD 0/10
1995	SOUTH FORK	SUMMER CHINOOK	96-218	6/17/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, VIRO 0/10, BACTE 0/8

LOCATION		Class		Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species	Log #		IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1995	SOUTH FORK	SUMMER CHINOOK	96-252	7/25/96	-	-			-	-	-				INSPECTION	PS.FLUORESCENS, FAT 0/10, VIRO 0/10, BACTE 0/8
1996	WYOMING	GRAYLING	96-265	8/7/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/7
1996	SOUTH FORK	SUMMER CHINOOK	96-306	8/23/96	-	-		+							INSPECTION	RS; ELISA 1/12 lw, WHD 0/12, VIRO 0/12
1995	SOUTH FORK	SUMMER CHINOOK	96-403	9/26/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, BACTE 0/8, VIRO 0/10
1995	SOUTH FORK	SUMMER CHINOOK	96-433	10/18/96				-	-	-	-				INSPECTION	PS.FLUORESCENS 2/8, FAT 0/10
1995	SOUTH FORK	SUMMER CHINOOK	96-484	11/13/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, FAT 0/10, VIRO 0/10
1995	SOUTH FORK	SUMMER CHINOOK	96-528	12/16/96				-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, VIRO 0/10, BACTE 0/8
MCCALL SUBREGION		D														
WILD	MUD CREEK	RAINBOW TROUT	96-232A	6/28/96									-		INSPECTION	NO WHIRLING DISEASE (MYXOBOLUS) DETECTED BY DIGESTION; WHD 0/15
WILD	MUD CREEK	BROOK TROUT	96-232B	6/28/96									-		INSPECTION	NO MYXOBOLUS SPORES DETECTED BY DIGESTION; WHD 0/81
WILD	S F SALMON RIVER	SUMMER CHINOOK	96-232C	6/28/96									-		INSPECTION	NO MYXOBOLUS SPORES DETECTED BY DIGESTION; WHD 0/2
WILD	S F SALMON RIVER	STEELHEAD, A GROUP	96-232D	6/28/96									-		INSPECTION	NO MYXOBOLUS SPORES DETECTED BY DIGESTION; WHD 0/1
FERAL	CASCADE RESERVOIR	RAINBOW TROUT	96-240	7/10/96											RESEARCH	SINGLE PARASITISM - SANGUINICOLA (PRESUMPTIVE) 7/16
WILD	BIG CREEK	BROOK TROUT	96-530	8/15/96									-		WILD FISH	NO PATHOGENS DETECTED; WHD 0/16
WILD	BIG CREEK	STEELHEAD	96-531	8/15/96									-		WILD FISH	NO PATHOGENS DETECTED; WHD 0/4
WILD	JOHNSON CREEK	BROOK TROUT	96-532	8/15/96									-		WILD FISH	NO PATHOGENS DETECTED; WHD 0/43
WILD	SAND CREEK	BROOK TROUT	96-533	8/15/96									-		WILD FISH	NO PATHOGENS DETECTED; WHD 0/57
WILD	JOHNSON CREEK	BROOK TROUT	96-534	8/16/96									-		WILD FISH	NO PATHOGENS DETECTED; WHD 0/24
NAMPA HATCHERY		A														
1995	HAYSPUR	RAINBOW TROUT	96-009	1/12/96	-	-			-	-	+				DIAGNOSTIC	CWD, MAS, VIRO 0/5, F.PSYCHROPHILUS 4/7, AEROMONAS SP. 3/7
1995	HAYSPUR	RAINBOW TROUT	96-066	3/6/96	-	-			-	-	+				DIAGNOSTIC	CWD; VIRO 0/6, F.PSYCHROPHILUS 2/8
1995	SARATOGA	BROWN TROUT	96-088	3/19/96	-	-			-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
1995	HAYSPUR	RAINBOW TROUT	96-128	4/4/96	-	-			-	-	-				DIAGNOSTIC	MAS; VIRO 0/8, AEROMONAS SP. 2/8
1996	HAYSPUR	RAINBOW TROUT	96-159	4/17/96					-	-	+				DIAGNOSTIC	CWD; F.PSYCHROPHILUS 6/8
ADULT	HELLS CANYON	STEELHEAD, A GROUP	96-212	5/22/96	-	-		+	-	-	-	-	-		INSPECTION	RS, FAT 0/5, VIRO 0/1, C.SHASTA 0/1, WHD 0/1, ELISA 1/1 lw, BACTE 0/1
1995	COLORADO RIVER	RAINBOW TROUT	96-226	6/21/96	-	-			-	-	+				DIAGNOSTIC	CWD; VIRO 0/10, F.PSYCHROPHILUS 7/8
1996	COLORADO RIVER	RAINBOW TROUT	96-231	6/28/96					-	-	+				DIAGNOSTIC	CWD; F.PSYCHROPHILUS 7/8
1996	TROUT LODGE	KAMLOOPO RBT	96-332	8/4/96	-	-			-	-	+				DIAGNOSTIC	MAS, CWD; VIRO 0/10, F.PSYCHROPHILUS 1/4, A.HYDROPHILA 2/4
1996	TROUT LODGE	KAMLOOPO RBT	96-333	8/4/96	-	-			-	-	+				DIAGNOSTIC	CWD, MAS, VIRO 0/10, F.PSYCHROPHILUS 1/4, A.SOBRIA 1/4

LOCATION		Class		Log #	Sample Date	IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH	ExamType	Diagnoses
BroodYr	Stock	Species															
1996	TROUT LODGE	KAMLOOP RBT		96-352	9/9/96					-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; BACTE 0/8
1996	TROUT LODGE	KAMLOOP RBT		96-364	9/11/96	-	-			-	-	-				DIAGNOSTIC	MAS, SINGLE PARASITISM (HEXAMITA); A. HYDROPHILA 5/8, VIRO 0/10
NAMPA RESEARCH		D															
	BIG WOOD RIVER	BROWN TROUT		96-445	10/17/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 2/2 (5-FISH POOLS)
	PAHSIMEROI RIVER	STEELHEAD, A GROUP		96-447	10/22/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 13/20
	PAHSIMEROI RIVER	STEELHEAD, A GROUP		96-448	10/22/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 12/20
	CASTLE ROCK	RAINBOW TROUT		96-449	10/22/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 9/9 (5-FISH POOLS)
	COPPER BASIN	RAINBOW TROUT		96-450	10/16/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 20/20
	COPPER BASIN	RAINBOW TROUT		96-450A	10/16/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 20/20
	BIG LOST RIVER	BROOK TROUT		96-451	10/16/96								+			RESEARCH	WHD RESULTS: POSITIVE MYXOBOLUS BY DIGEST 1/2 (5 FISH POOLS)
1996	BIG LOST RIVER	RAINBOW TROUT		96-492	11/13/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 10/10
1996	EAST FORK BIG LOST RIVER	RAINBOW TROUT		96-493	11/13/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 10/10
1996	EAST FORK BIG LOST RIVER	RAINBOW TROUT		96-494	11/13/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 7/10
	UNKNOWN	RAINBOW TROUT		96-495	11/13/96											RESEARCH	CANCELLED REPORT
	EAST FORK BIG LOST RIVER	BROOK TROUT		96-505	11/26/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 8/14
WILD	S F BOISE RIVER	RAINBOW TROUT		96-512	12/2/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 1/5
WILD	BIG WOOD RIVER	RAINBOW TROUT		96-513	12/3/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 4/5
	EAST FORK BIG LOST RIVER	RAINBOW TROUT		96-520	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 20/20
	EAST FORK BIG LOST RIVER	CUTTHROAT TROUT		96-521	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 20/20
	EAST FORK BIG LOST RIVER	RAINBOW TROUT		96-522	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 18/20
	EAST FORK BIG LOST RIVER	CUTTHROAT TROUT		96-523	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 20/20
	EAST FORK BIG LOST RIVER	RAINBOW TROUT		96-524	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 20/20
	EAST FORK BIG LOST RIVER	CUTTHROAT TROUT		96-525	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 19/19
	EAST FORK BIG LOST RIVER	RAINBOW TROUT		96-526	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 15/20
	EAST FORK BIG LOST RIVER	CUTTHROAT TROUT		96-527	12/10/96								+			RESEARCH	WHD RESULTS: POSITIVE BY DIGEST 18/19
NIAGARA SPRINGS HATCHERY		C															
1995	PAHSIMEROI RIVER	STEELHEAD, A GROUP		96-004	1/4/96	+	-			+	-	+				DIAGNOSTIC	IHNV, FURUNCULOSIS, CWD; IHN 2/2 (5-FISH POOLS), A. SALMONICIDA 8/8, F. PSYCHROPHILUS 2/8
1995	HELLS CANYON	STEELHEAD, A GROUP		96-005	1/4/96	+	-			+	-	+				DIAGNOSTIC	FURUNCULOSIS, IHNV, CWD; IHNV 2/2 (5-FISH POOLS), IPN 0/10, FUR 8/8, ERM 0/8, CWD 2/8
1994	HELLS CANYON	STEELHEAD, A GROUP		96-054	2/22/96	+	-			-	-	-				INSPECTION	IHN, MAS, IHNV 2/2 (5-FISH POOLS), IPN 0/10, A. HYDROPHILA 1/8, PSEUDOMONAS SPP 1/8

LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPH	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1994	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-055	2/22/96	+	-			-	-	-	+				INSPECTION	CWD, IHN; FAT 0/2, IHNV 2/2 (5-FISH POOLS), F.PSYCHROPHILUS 4/8
1995	HELLS CANYON	STEELHEAD, A GROUP	96-105	3/26/96	-	-			-				-			INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/20, FAT 0/20, WHD 0/20
1995	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-106	3/26/96	-	-			-				-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/20, ELISA 0/20, VIRO 0/20, WHD 0/20
1996	HELLS CANYON	STEELHEAD, A GROUP	96-250	7/24/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-251	7/24/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
1996	HELLS CANYON	STEELHEAD, A GROUP	96-275	8/9/96	-	-			-	-	+					DIAGNOSTIC	CWD, MAS; A SOBRIA 6/8, F.PSYCHROPHILUS 1/8, VIRO 0/10
1996	HELLS CANYON	STEELHEAD, A GROUP	96-389	9/25/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-390	9/25/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	HELLS CANYON	STEELHEAD, A GROUP	96-429	10/17/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-430	10/17/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/4
1996	HELLS CANYON	STEELHEAD, A GROUP	96-501	11/26/96	-	-			-	-	+					INSPECTION	CWD; VIRO 0/10, F.PSYCHROPHILUS 3/4, FLAVORBACTER 4/4
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-502	11/26/96	-	-			-	-	-					INSPECTION	PS CHLORORAPHIS 6/8; VIRO 0/10
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-537	12/19/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
1996	HELLS CANYON	STEELHEAD, A GROUP	96-538	12/19/96	-	-			-	-	-					INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, BACTE 0/8
NMFS, MAN-W																	
BY94	LEMHI RIVER	CHINOOK	96-381A	9/20/96	-	-			-				-			RESEARCH	NO PATHOGENS DETECTED; ELISA 0/4, FAT 0/4, VIRO 0/4, WHD 0/4
BY94	EAST FORK	CHINOOK	96-381B	9/20/96	-	-			-				+			RESEARCH	WHD; M.CEREBRALIS 1/4 CONFIRMED HISTOLOGICALLY, ELISA 0/4, FAT 0/4, VIRO 0/4
BY94	YANKEE FORK RIVER	CHINOOK	96-381C	9/20/96	-	-			-				-			RESEARCH	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1, FAT 0/1, WHD 0/1
OREGON DEPT OF FISH AND WILDLIFE																	
		D															
BY94	RED FISH LAKE (BONNEVILLE HATCHERY)	SOCKEYE SALMON	96-063	1/23/96				+								INSPECTION	BKD; ELISA 67/273
BY94	RED FISH LAKE (BONNEVILLE HATCHERY)	SOCKEYE SALMON	96-171	4/23/96				+								INSPECTION	RS; ELISA 49/262 (11 high, 38 low)
BROOD	RED RIVER	SPRING CHINOOK	96-338	8/27/96				+								INSPECTION	RS; ELISA 18/32 (11 low, 1 mod, 6 high)
BROOD	WALLOWA	SPRING CHINOOK	96-365	9/11/96				+								INSPECTION	RS; ELISA 13/25 (8 low, 1 mod, 4 high)
		C															
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-076	3/11/96	-	-		+					-	-		INSPECTION	RS; CSH 0/5, ELISA 1/10 low, WHD 0/5, VIRO 0/20
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-087	3/18/96	-	-		+					-	-		INSPECTION	RS; ELISA 1/9 low, CSH 0/9, VIRO 0/18, WHD 0/5, VIRO 0/18
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-103	3/25/96	-	-		-					-	-		INSPECTION	NO PATHOGENS DETECTED; VIRO 0/20, ELISA 0/10, WHD 0/5

LOCATION		Class		Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species	Log #		IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-110	1/11/96				+							INSPECTION	RS, ELISA 4/10 low
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-111	1/11/96								-	+		INSPECTION	SINGLE PARASITISM, WHD 0/11, CSH 1/2 (5 FISH POOLS)
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-120	4/1/96	-	-		+				-	-		INSPECTION	RS, ELISA 5/5 low, VIRO 0/20, WHD 0/5, CSH 0/5
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-137	4/8/96	+	-		+				-			INSPECTION	RS, IHNV; ELISA 6/10 low, IHNV 9/19, WHD 0/5, IPN 0/19
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-151	4/11/96	+	-									INSPECTION	IHNV; IHNV 6/12 (2-FISH POOLS), IPN 0/24
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-153	4/15/96	+	-		+				-			INSPECTION	IHNV, RS; ELISA 2/10 low, WHD 0/5, IHNV 4/4 (2,3 FISH POOLS), IPN 0/12
BROOD	HELLS CANYON	STEELHEAD, A GROUP	96-466	11/5/96	-	-			-	-					INSPECTION	ACINETOBACTER CULTURED FROM LESION, VIRO 0/3
PAHSIMEROI HATCHERY		C														
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-058	2/29/96	-	-		-	-	-	-				INSPECTION	AEROMONAS HYDROPHILA; VIRO 0/6, MAS 3/4, FAT 0/6, MOST LIKELY EARLY EXPOSURE TO GAS SUPERSATURAITON
1995	YELLOW BELLY LAKE	CUTTHROAT TROUT	96-059	2/29/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/14
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-079	3/14/96	-	-		-							INSPECTION	NO PATHOGENS DETECTED; ELISA 0/7, VIRO 0/6
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-104	3/26/96	-	-		+				-			INSPECTION	RS, VIRO 0/10, ELISA 1/5 low, WHD 0/5
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-113	3/28/96	-	-		+				-			INSPECTION	RS, VIRO 0/10, ELISA 1/5 low, WHD 0/5
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-121	4/1/96	-	-		+				-			INSPECTION	RS, VIRO 0/10, ELISA 1/5 low, WHD 0/20
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-136	4/4/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/30
BROOD	HELLS CANYON/PAH	STEELHEAD, A GROUP	96-138	4/8/96	-	-		+				-			INSPECTION	RS, VIRO 0/10, ELISA 2/5 low
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-163	4/18/96	-	-		+				+			INSPECTION	WHD, RS; ELISA 2/5 low, VIRO 0/30, M.CEREBRALIS 1/1 (5-FISH POOL)
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-172	4/22/96	-	-		+				-			INSPECTION	RS; ELISA 2/5 LOW, WHD 0/5, VIRO 0/30
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-176	4/25/96	-	-		+				-			INSPECTION	RS; ELISA 1/10 low, VIRO 0/5, WHD 0/10
BROOD	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-185	4/29/96				+				-			INSPECTION	RS; WHD 0/10, ELISA 1/10 low
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-189	5/2/96				-	-	+					DIAGNOSTIC	MAS, CWD; A.HYDROPHILA 7/8, F.PSYCHROPHILUS 2/8
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-190	5/2/96				+				-			DIAGNOSTIC	RS; ELISA 6/10 low, WHD 0/10
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-211	5/21/96	-	-		-	-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/5, VIRO 0/5, WHD 0/5, BACTE 0/4
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-216	6/12/96	-	-			-	-	+	-			DIAGNOSTIC	MAS, CWD; F.PSYCHROPHILUS 7/8, FAT 0/10, VIRO 0/10, WHD 0/25
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-314	8/25/96	-	-		-				+			INSPECTION	WHD; ELISA 0/2, VIRO 0/2, M.CEREBRALIS 1/2
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-331	9/4/96	-	-		+				-			INSPECTION	RS; ELISA 2/3 (low), VIRO 0/3, WHD 0/3
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-339	9/5/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1, WHD 0/1
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-357	9/9/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/3, VIRO 0/3, WHD 0/3
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-369	9/12/96	-	-		+				-			INSPECTION	RS, ELISA 1/2 LOW, VIRO 0/2, WHD 0/2

LOCATION		Class		Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species	Log #		IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-374	9/16/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/3, WHD 0/3, VIRO 0/3
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-387	9/23/96	-	-		+				-			INSPECTION	RS, ELISA 1/2 LOW, WHD 0/2, VIRO 0/2
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-405	9/26/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/1, VIRO 0/1, WHD 0/1
BROOD	PAHSIMEROI RIVER	SUMMER CHINOOK	96-410	10/1/96	-	-		+				-			INSPECTION	RS, ELISA 1/1 LOW, VIRO 0/1, WHD 0/1
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-476	11/8/96				-	-	-	+				DIAGNOSTIC	MAS, CWD; FAT 0/7, F.PSYCHROPHILUS 1/8, AEROMONAS HYDROPHILA 5/8
1996	PAHSIMEROI RIVER	STEELHEAD, A GROUP	96-477	11/8/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/4, TGP GAS 109.9%
1995	YELLOW BELLY LAKE	CUTTHROAT TROUT	96-478	11/8/96								+			INSPECTION	WHD; M.CEREBRALIS 1/1 (2 FISH-POOLS), TGP GAS
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-509	12/5/96	-	-		-	-	-	+				INSPECTION	CWD; PSEUDOMONAS SP. 1/4; FAT 0/5, VIRO 0/5, FLEXIBACTER SP. 1/5, TGP GAS 112%
POWELL PONDS		C														
BROOD	POWELL	SPRING CHINOOK	96-263	8/5/96	-	-		+				-			INSPECTION	RS, ELISA 6/7 (OD#S= 0.137, 0.126, 0.222, 0.176, 0.165, 0.287), VIRO 0/7, WHD 0/7
BROOD	POWELL	SPRING CHINOOK	96-273	8/9/96	-	-		+				-	-		INSPECTION	RS, CSH 0/3, ELISA 3/5 (OD #S 0.106, 0.107, 0.203), WHD 0/5, VIRO 0/5
BROOD	POWELL	SPRING CHINOOK	96-278	8/13/96	-	-		+				-			INSPECTION	RS, VIRO 0/24, ELISA 18/24 (17 LOW, 1 MOD), WHD 0/9
BROOD	POWELL	SPRING CHINOOK	96-296	8/16/96	-	-		+							INSPECTION	RS, VIRO 0/10, ELISA 7/10 LOW OD'S
BROOD	POWELL	SPRING CHINOOK	96-302	8/20/96	-	-		+							INSPECTION	RS, ELISA 8/14 LOWS, VIRO 0/14
BROOD	POWELL	SPRING CHINOOK	96-312	8/23/96	-	-		+							INSPECTION	RS, ELISA 2/3 LOW OD'S, VIRO 0/3
BROOD	POWELL	SPRING CHINOOK	96-318	8/26/96	-	-		+							INSPECTION	RS, ELISA 2/3 low, VIRO 0/3
PRIVATE		D														
1995	THREE RIVER RANCH	RAINBOW X CUTTH HYBRID	96-249	7/17/96											DIAGNOSTIC	GAS BUBBLE DISEASE (PRESUMPTIVE)
1996	ACE DEVELOPMENT	PACU	96-419	10/10/96	-	-		-	-	-	-	-	-		INSPECTION	NO PATHOGENS DETECTED; FAT 0/60, VIRO 0/60, WHD 0/60, CSH 0/60, BACTE 0/60
1996	ACE DEVELOPMENT	TILAPIA	96-491	11/19/96	-	-		-	-	-	-	-	-		CERTIFICATION	PSUEDOMONAS SPP. 2/20; CSH 0/60, FAT 0/60, VIRO 0/60, WHD 0/60
RANGEN AQUA CTR		D														
1996	RANGEN	RAINBOW TROUT	96-169	4/19/96				-				-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/60, WHD 0/60
RAPID RIVER HATCHERY		C														
1994	RAPID RIVER	SPRING CHINOOK	96-001	1/3/96	-	-	-	-	-	-	-	-			INSPECTION	MYXOBOLUS SPP. 2/4 (APPROPRIATE SIZE NEAR M.CEREBRALIS BUT NOT CONFIRMED BY HISTO), FAT 0/20, VIRO 0/20, EIBS 0/20, BACTE 0/8, WHD 0/20
1994	RAPID RIVER	SPRING CHINOOK	96-043	2/13/96	-	-		-	-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, WHD 0/10, BACTE 0/4
1994	RAPID RIVER	SPRING CHINOOK	96-080	3/16/96	-	-		+				-			INSPECTION	RS, VIRO 0/20, EIBS 0/20, FAT 0/20, ELISA 2/4 (5-FISH POOLS) LOW, WHD 0/20
1995	RAPID RIVER	SPRING CHINOOK	96-175	4/25/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED, FAT 0/15, VIRO 0/10, BACTE 0/4

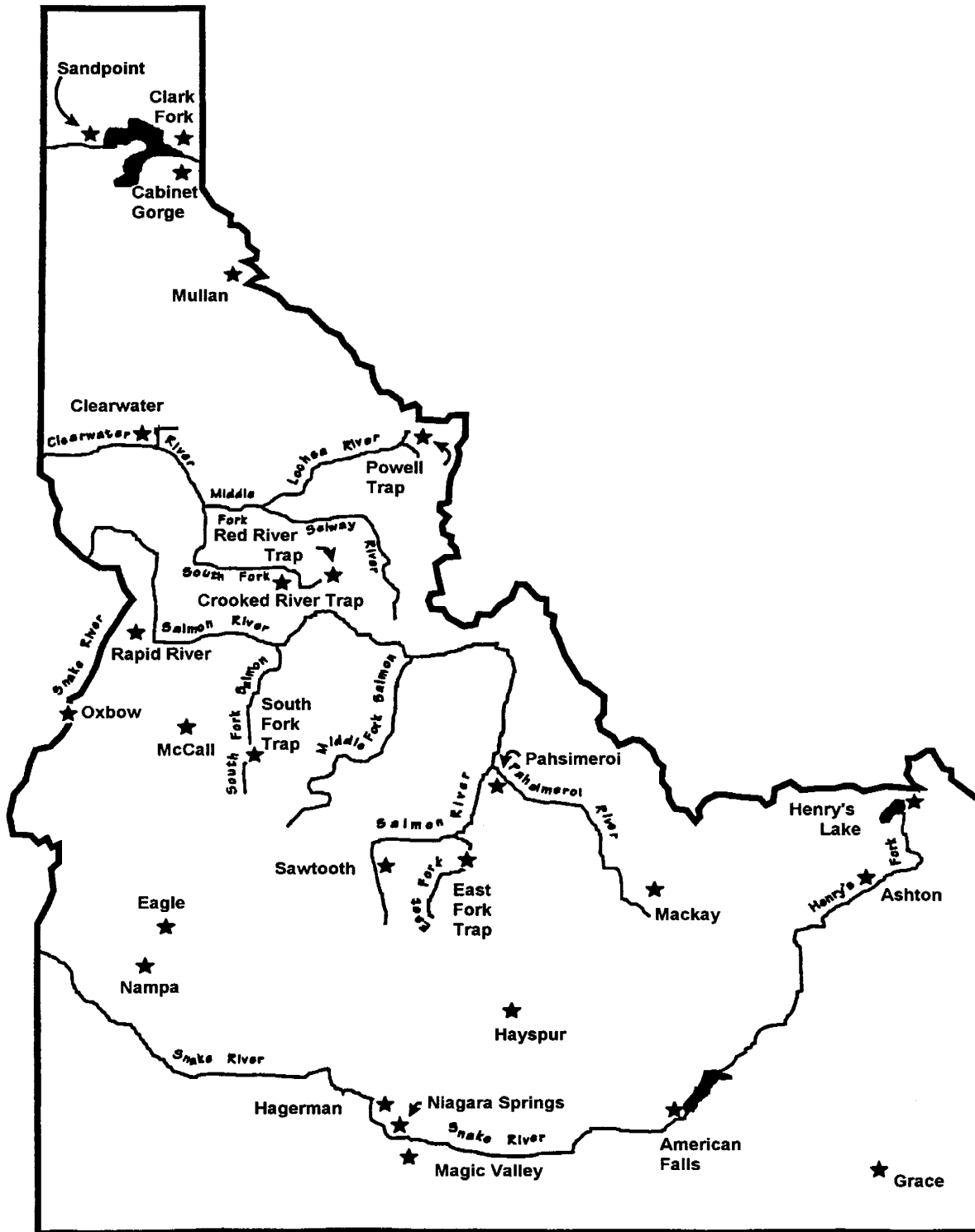
LOCATION		Class		Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species				IHN	IPN	EBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH		
1995	RAPID RIVER	SPRING CHINOOK		96-219	6/17/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE 0/8
1995	RAPID RIVER	SPRING CHINOOK		96-253	7/25/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, FAT 0/10, BACTE 0/8
BROOD	RAPID RIVER	SPRING CHINOOK		96-274	8/13/96	+	-		+				-			INSPECTION	IHN, RS; ELISA 5/7 (4 low, 1 high) OD#S= 0.130, 0/142, 0/103, 0.138, 1.390; IHN 4/7, IPN 0/7, WHD 0/7
1996	RAPID RIVER	SPRING CHINOOK		96-293	8/16/96	-	-		-	-	-	-				DIAGNOSTIC	ACINETOBACTER 3/8, FAT 0/10, VIRO 0/10
BROOD	RAPID RIVER	SPRING CHINOOK		96-298	8/19/96	+	-		+				-			INSPECTION	RS; ELISA 14/16 (12 low, 2 high), WHD 0/15, IHN 4/16, IPN 0/16
BROOD	RAPID RIVER	SPRING CHINOOK		96-305	8/22/96	-	-		+				-			INSPECTION	RS; ELISA 5/6 low, VIRO 0/6, WHD 0/5
BROOD	RAPID RIVER	SPRING CHINOOK		96-310	8/26/96	+	-		+				-			INSPECTION	RS, IHNV; IHN 12/20, IPN 0/20, WHD 0/5, ELISA 19/20 (18 low, 1 high)
BROOD	RAPID RIVER	SPRING CHINOOK		96-325	8/29/96	+	-		+							INSPECTION	RS; ELISA 74/80 (65 low, 9 high), IHN 12/18 (5-fish pools)
BROOD	RAPID RIVER	SPRING CHINOOK		96-330	9/3/96				+							INSPECTION	RS; ELISA 87/91 (65 Lows, 22 Highs)
BROOD	RAPID RIVER	SPRING CHINOOK		96-351	9/6/96				+							INSPECTION	RS; ELISA 46/61 (5 mod, 41 low)
BROOD	RAPID RIVER	SPRING CHINOOK		96-356	9/9/96				+							INSPECTION	RS; ELISA 24/31 (19 low, 4 mod, 1 high)
BROOD	RAPID RIVER	SPRING CHINOOK		96-367	9/12/96				+							INSPECTION	RS; ELISA 14/15 (12 low, 1 mod, 1 high)
1995	RAPID RIVER	SPRING CHINOOK		96-404	9/26/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, FAT 0/10, VIRO 0/10
1995	RAPID RIVER	SPRING CHINOOK		96-485	11/13/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/8, FAT 0/10, VIRO 0/10
1995	RAPID RIVER	SPRING CHINOOK		96-529	12/16/96				-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/5, VIRO 0/5, BACTE 0/4
RED RIVER PONDS		C															
1994	RED RIVER	SPRING CHINOOK		96-131	4/4/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/20, FAT 0/20, WHD 0/20, VIRO 0/20
1992	RED RIVER	SPRING CHINOOK		96-271	8/7/96									+		INSPECTION	C. SHASTA; CERATOMYXA 1/2
BROOD	RED RIVER	SPRING CHINOOK		96-335	8/29/96	-	-		+							INSPECTION	RS; ELISA 2/2 (1 low, 1 high), VIRO 0/2
BROOD	RED RIVER	SPRING CHINOOK		96-354	9/6/96	-	-		+							INSPECTION	RS; ELISA 1/1 low, VIRO 0/1
BROOD	RED RIVER	SPRING CHINOOK		96-361	9/10/96	-	-		+							INSPECTION	RS; VIRO 0/4, ELISA 2/4 (1 low, 1 mod)
BROOD	RED RIVER	SPRING CHINOOK		96-371	9/13/96	-	-		+				-			INSPECTION	RS; MYXOBOLUS SPP. 2/2, ELISA 2/2 (1 low, 1 high), VIRO 0/2, WHD 0/2, NO SPORES FOUND IN HISTO
BROOD	RED RIVER	SPRING CHINOOK		96-378	9/17/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/6
BROOD	RED RIVER	SPRING CHINOOK		96-401	9/23/96	-	-		+							INSPECTION	RS; ELISA 1/1 HIGH OD, VIRO 0/1
BROOD	RED RIVER	SPRING CHINOOK		96-488	11/14/96								-			INSPECTION	NO PATHOGENS DETECTED; WHD 0/6
SANDPOINT HATCHERY		B															
1993	WASHOE PARK	CUTTHROAT TROUT		96-200	5/13/96	-	-		-	-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10, WHD 0/60, FAT 0/60, ELISA 0/60, BACTE 0/12
1992	WASHOE PARK	CUTTHROAT TROUT		96-201	5/13/96	-	-		-	-	-	-	-			INSPECTION	PSEUDOMONAS SEPTICEMIA, NO CERTIFIABLE PATHOGENS DETECTED; VIRO 0/60, WHD 0/60, FAT 0/60, ELISA 0/60, BACTE 0/12

LOCATION		Class	Log #	Sample Date											ExamType	Diagnoses
BroodYr	Stock	Species			IRN	IPN	EBB	BID	FUR	ERM	CWD	WHD	CSH	ICH		
BROOD	WOLF LODGE CREEK	FALL CHINOOK	96-359	9/10/96	-	-		+				-			INSPECTION	RS; FAT 0/12, WHD 0/12, ELISA 1/12 low, VIRO 0/12
BROOD	WOLF LODGE CREEK	FALL CHINOOK	96-373	9/16/96	-	-		-				-			INSPECTION	NO PATHOGENS DETECTED; ELISA 0/5, VIRO 0/5, WHD 0/5
BROOD	WOLF LODGE CREEK	FALL CHINOOK	96-395	9/19/96	-	-		+				-			INSPECTION	RS; ELISA 1/2 LOW OD'S, WHD 0/2, VIRO 0/2
BROOD	WOLF LODGE CREEK	FALL CHINOOK	96-408	9/25/96	-	-		+				-			INSPECTION	RS; ELISA 2/15 (1 LOW, 1 HIGH), VIRO 0/15, WHD 0/15
1992	WASHOE PARK	CUTTHROAT TROUT	96-539	12/17/96	-	-		+	-	-	-	-			INSPECTION	POSITIVE FOR RS ANTIGEN BY ELISA (VERY LOW); VIRO 0/60, ELISA 1/12 (5 FISH POOLS) LOW, WHD 0/30, BACTE 0/20
1993	WASHOE PARK	CUTTHROAT TROUT	96-540	12/17/96	-	-		-	-	-	-	-			INSPECTION	PSEUDOMONAD BACTEREMIA (VERY LOW LEVELS); ELISA 0/60, FAT 0/60, VIRO 0/60, WHD 0/30
SAWTOOTH HATCHERY		C														
1994	EAST FORK	SPRING CHINOOK	96-028	1/24/96				-				+			WILD FISH	WHD CONFIRMED HISTOLOGICALLY; FAT 0/1, M.CEREBRALIS 1/1, ELISA 0/1
1994	SAWTOOTH	SPRING CHINOOK	96-029	1/25/96				-				-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/1, WHD 0/1, HISTO - NO SPORES SEEN
1994	SAWTOOTH	SPRING CHINOOK	96-030	1/1/96				-				-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/1, WHD 0/1
1994	SAWTOOTH	SPRING CHINOOK	96-031	1/1/96				-				-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/1, WHD 0/1
1994	SAWTOOTH	STEELHEAD, A GROUP	96-034	1/30/96								+			INSPECTION	WHD; M.CEREBRALIS 3/6 POOLS
BY94	WEST FORK YANKEE FORK RIVER	SPRING CHINOOK	96-036	2/7/96	-	-		-				-			WILD FISH	NO PATHOGENS DETECTED; VIRO 0/1, WHD 0/1, ELISA 0/1, FAT 0/1
BY94	EAST FORK SALMON RIVER	SPRING CHINOOK	96-037	2/7/96	-	-		-				-			WILD FISH	NO PATHOGENS DETECTED; VIRO 0/2, WHD 0/2, ELISA 0/2, FAT 0/2
1994	LEMHI RIVER	SPRING CHINOOK	96-038	2/7/96	-	-		-				+			WILD FISH	WHD; M.CEREBRALIS 1/2, VIRO 0/2, ELISA 0/2, FAT 0/2
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-057	2/28/96	-	-		-	-	-	-				INSPECTION	OPEN CASE AWAITING HISTO; VIRO 0/9, PS.FLUORESCENS 2/4
1994	SAWTOOTH	SPRING CHINOOK	96-086	3/18/96	-	-		+				-			INSPECTION	RS; FAT 0/20, ELISA 3/4(5-FISH POOLS) LOW, WHD 0/20, VIRO 0/20
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-119	3/28/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/18
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-127	4/1/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/18
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-135	4/4/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/18
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-143	4/5/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/7
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-144	4/8/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/47
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-145	4/9/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/9
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-152	4/11/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/33
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-155	4/15/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/38
BROOD	EAST FORK SALMON RIVER	STEELHEAD, A GROUP	96-156	4/12/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/10
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-160	4/16/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-161	4/18/96	-	-									INSPECTION	NO PATHOGENS DETECTED; VIRO 0/29

LOCATION		Class		Log #	Sample Date	IHN	IPN	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH	ExamType	Diagnoses
BroodYr	Stock	Species															
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-166	4/22/96					-							INSPECTION	NO PATHOGENS DETECTED; ELISA 0/2
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-167	4/22/96					-	-	-	-				INSPECTION	PSEUDOMONAS FLUORESCENS SEPTCEMIA; FAT 0/6, BS 4/6
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-173	4/22/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/9
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-183	4/25/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-184	4/26/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-186	5/2/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-188	5/2/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/16
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-195	5/8/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-196	4/4/96					+				+			INSPECTION	WHD, RS; ELISA 7/11 (5-FISH POOLS) LOW, M.CEREBRALIS 1/11 (5-FISH POOLS)
BROOD	EAST FORK SALMON RIVER	STEELHEAD, B GROUP	96-197	4/4/96					+				+			INSPECTION	RS, WHD; ELISA 19/38 (1 high, 18 low), M.CEREBRALIS 3/4 (3-FISH POOLS)
BROOD	SLATE CREEK	STEELHEAD, B GROUP	96-198	4/4/96					+				-			INSPECTION	RS; ELISA 10/18 (1 HIGH, 9 LOW), WHD 0/11
1995	SAWTOOTH	SPRING CHINOOK	96-215	6/11/96	-	-			-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, VIRO 0/10, BACTE 0/8
1995	NAMPA	KAMLOOP RBT	96-236	7/5/96						-	-	-				DIAGNOSTIC	PSUEDOMONAS SPP. 4/4
1996	PAHSIMEROI RIVER	SUMMER CHINOOK	96-237	7/5/96					-	-	-	-				DIAGNOSTIC	NO PATHOGENS DETECTED; FAT 0/10, BACTE 0/4
1996	WYOMING	GRAYLING	96-248	7/18/96												DIAGNOSTIC	GAS BUBBLE DISEASE
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-266	8/11/96	-	-			-							INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, VIRO 0/10
BROOD	SAWTOOTH	SPRING CHINOOK	96-277	8/12/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/1
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-279	8/15/96	-	-			+	-	-	+				DIAGNOSTIC	MAS, CWD, RS; A.SOBRIA 4/4, PS.FLUORESCENS 2/4, F.PSYCHROPHILUS 1/4, ELISA 1/2 POOLS 1 low, DFAT 0/7, VIRO 0/10
BROOD	SAWTOOTH	SPRING CHINOOK	96-301	8/19/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	SAWTOOTH	SPRING CHINOOK	96-316	8/26/96	-	-										INSPECTION	NO PATHOGENS DETECTED; VIRO 0/4
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-327	8/31/96					-	-	-	-				INSPECTION	MAS; ELISA 0/6, FAT 0/6, AEROMONAS HYDROPHILA 4/6
BROOD	SAWTOOTH	STEELHEAD, A GROUP	96-329	8/30/96	-	-										DIAGNOSTIC	NO PATHOGENS DETECTED; VIRO 0/2
BROOD	SAWTOOTH	SPRING CHINOOK	96-366	9/11/96	-	-			+				-			INSPECTION	RS; VIRO 0/1, WHD 0/14, ELISA 6/10 low
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-388	9/25/96	-	-			-	-	-	+				INSPECTION	CWD; F.PSYCHROPHILUS 1/8, FAT 0/10, VIRO 0/10
BY94	LEMHI RIVER	SPRING CHINOOK	96-415	1/4/96									+			WILD FISH	WHD; M.CEREBRALIS 2/2, GROUP PREVIOUSLY CONFIRMED POSITIVE BY HISTO
BY94	WEST FORK YANKEE FORK RIVER	SPRING CHINOOK	96-417	1/4/96									-			WILD FISH	NO PATHOGENS DETECTED; WHD 0/2
1995	SAWTOOTH	SPRING CHINOOK	96-418	10/9/96	-	-			-	-	-	-				INSPECTION	MAS; VIRO 0/9, FAT 0/9, AEROMONAS HYDROPHILA 1/8
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-424	10/11/96					-	-	-	-	-			INSPECTION	NO PATHOGENS DETECTED; FAT 0/10, WHD 0/10, BACTE 0/4

LOCATION		Class														Page 23
BroodYr	Stock	Species	Log #	Sample Date	WHN	IPW	EIBS	BKD	FUR	ERM	CWD	WHD	CSH	ICH	ExamType	Diagnoses
1995	SAWTOOTH	SPRING CHINOOK	96-437	10/23/96				+	-	-	-				INSPECTION	RS; ELISA 3/5 LOW OD'S, BACTE 0/6
1995	LEMHI RIVER	SPRING CHINOOK	96-479	11/12/96	-	-	-	-	-	-	+	+			WILD FISH	WHD (PRESUMPTIVE), CWD; FAT 0/3, EIBS 0/3, F.PSYCHROPHILUS 3/3, M.CEREBRALIS 1/1 (3-FISH POOLS), VIRO 0/3
1995	PAHSIMEROI RIVER	SUMMER CHINOOK	96-508	12/4/96	-	-		-	-	-	-				INSPECTION	NO PATHOGENS DETECTED; BACTE 0/4, FAT 0/5, VIRO 0/5
SOUTH FORK		D														
BROOD	SOUTH FORK	SUMMER CHINOOK	96-294	8/16/96				+				-			INSPECTION	RS; ELISA 11/25 LOW OD'S, WHD 0/10
BROOD	SOUTH FORK	SUMMER CHINOOK	96-300	8/20/96	-	-		+				-			INSPECTION	RS; ELISA 2/13, VIRO 0/13, WHD 0/5
BROOD	SOUTH FORK	SUMMER CHINOOK	96-315	8/27/96	-	-		+				-			INSPECTION	RS; ELISA 4/35 (2 high, 2 low), VIRO 0/35, WHD 0/5
BROOD	SOUTH FORK	SUMMER CHINOOK	96-326	8/30/96				+							INSPECTION	RS; ELISA 14/18 (13 low, 1 high)
BROOD	SOUTH FORK	SUMMER CHINOOK	96-340	9/6/96				+							INSPECTION	RS; ELISA 2/2 low
BROOD	SOUTH FORK	SUMMER CHINOOK	96-341	9/3/96				+							DIAGNOSTIC	RS; ELISA 6/7

IDAHO DEPARTMENT OF FISH AND GAME FISH HATCHERIES



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